09/336672
AH#5

```
      Set  Items  Description
      ---  -----  -----------
? s autoimmun?

     S1  141477  AUTOIMMUN?
? s self(w)antigen?

       317905  SELF
      1133095  ANTIGEN?
     S2  3643  SELF(W)ANTIGEN?
? s therap? or treat?

Processing
Processing
      4392471  THERAP?
      4073220  TREAT?
     S3 6748907  THERAP? OR TREAT?
? s s1 or s2

       141477  S1
         3643  S2
     S4  143617  S1 OR S2
? s plasmid? or vector?

       229988  PLASMID?
       247468  VECTOR?
     S5  415066  PLASMID? OR VECTOR?
? s gene(2w)s3

Processing
      1452225  GENE
      6748907  S3
     S6  46203  GENE(2W)S3
? s s6 and s5

        46203  S6
       415066  S5
     S7  22962  S6 AND S5
? s s4(10w)s6

       143617  S4
        46203  S6
     S8    337  S4(10W)S6
? s s4(5w)s6

       143617  S4
        46203  S6
     S9    246  S4(5W)S6
? s s4(3w)s6

       143617  S4
        46203  S6
    S10    169  S4(3W)S6
? ds


Set    Items  Description
S1    141477  AUTOIMMUN?
S2      3643  SELF(W)ANTIGEN?
S3   6748907  THERAP? OR TREAT?
S4    143617  S1 OR S2
S5    415066  PLASMID? OR VECTOR?
S6     46203  GENE(2W)S3
S7     22962  S6 AND S5
S8       337  S4(10W)S6
S9       246  S4(5W)S6
S10      169  S4(3W)S6
? rd

...examined 50 records  (50)
...examined 50 records  (100)
...examined 50 records  (150)
...completed examining records
    S11    164  RD (unique items)
? t s11/3,ab/1-164
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11/3,AB/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 1999 BIOSIS. All rts. reserv.

11974566 BIOSIS NO.: 199900227879
Gene therapy for autoimmune demyelinating disease of the central nervous system.
AUTHOR: Mathisen Peter M; Tuohy Vincent K(a)
AUTHOR ADDRESS: (a)Department of Immunology, Lerner Research Institute,
Cleveland Clinic Foundation, 9500 Euclid Av**USA
JOURNAL: Archivum Immunologiae et Therapiae Experimentalis 47 (1):p33-35
1999
ISSN: 0004-069X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Gene therapy is currently being explored as a new therapeutic treatment of autoimmune disease. The genetic modification of autoreactive memory T cells (T cell-mediated gene therapy) and autoimmune target tissue (target tissue gene therapy) to produce immunoregulatory cytokines offers a promising way to regulate %%%autoimmunity%%%. Furthermore, regenerative %%%gene%%% %%%therapy%%% offers the possibility of delivering growth factors to damaged autoimmune target tissue as a way of mediating repair. In the current review we discuss the different experimental models that are being used to test the efficacy of gene therapy in that treatment of autoimmune disease. We also discuss the importance of regulating transgene expression to ensure the therapeutic transgene products are delivered specifically to the autoimmune milieu in an antigen-inducible, non-constitutive manner.

11/3,AB/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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11355146 BIOSIS NO.: 199800136478
%%%Autoimmunity%%%, immunologic tolerance, and %%%gene%%% %%%therapy%%%.
AUTHOR: Chen Youhai(a)
AUTHOR ADDRESS: (a)Inst. Human Gene Therapy, Dep. Mol. Cell Engineering,
Univ. Pennsylvania Sch. Med., 422 Curie Bl**USA
JOURNAL: Immunologic Research 17 (1-2):p33-40 Jan., 1998
ISSN: 0257-277X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Research in our laboratory focuses on three major themes: 1. Costimulation and cell death in autoimmunity. 2. Molecular mechanisms of immunologic tolerance. 3. Gene therapy of autoimmune diseases. We have performed a large series of experiments using T cell receptor (TCR) transgenic mice examining mechanisms of autoimmunity and peripheral T cell tolerance. A major focus of our current research is to understand the roles of costimulation and cell death in T cell tolerance and T cell-mediated autoimmune diseases. This involves studies of the TCR, the costimulatory molecules, and the cytokines. We are also exploring novel strategies for the treatment of autoimmune diseases by gene transfer.

11/3,AB/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 1999 BIOSIS. All rts. reserv.

09363770 BIOSIS NO.: 199497372140
Constitutive and cytokine-induced expression of human leukocyte antigens and cell adhesion molecules by human myotubes.
AUTHOR: Michaelis Dorothea; Goebels Norbert; Hohlfeld Reinhard
AUTHOR ADDRESS: Dep. Neurol., Klinikum Grosshadern, Marchioninistrasse 15,
D-81366 Muenchen**Germany
JOURNAL: American Journal of Pathology 143 (4):p1142-1149 1993
ISSN: 0002-9440
DOCUMENT TYPE: Article

RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Understanding the immunobiology of muscle is relevant to muscular
%%%autoimmune%%% diseases and to %%%gene%%% %%%therapies%%% based on
myoblast transfer. We have investigated the constitutive and cytokine-induced intra- and extracellular expression of histocompatibility human leukocyte antigens (HLA) and cell adhesion molecules by multinucleated human myotubes using immunofluorescence microscopy. Myotubes constitutively expressed HLA class I but not HLA class II. Exposure to interferon-y, but not tumor necrosis factor-alpha, induced HLA-DR in the cytoplasm and on the surface membrane of apprxeq 40
to 95% of cultured myotubes. Surface expression was strongest in perinuclear membrane areas, and cytoplasmic expression was strongest at branching points and at the tips of myotubes. HLA-DP and HLA-DQ were not
expressed in detectable amounts. Both interferon-gamma and tumor necrosis factor-alpha induced the intercellular adhesion molecule-1 (CD54) in the cytoplasm and on the surface of nearly all myotubes. The distribution of intercellular adhesion molecule-1 and HLA-DR was similar but not identical in double-positive myotubes. The leukocyte function-associated (LFA) adhesion molecules LFA-1 (CD11a/CD18), LFA-2 (CD2), and LFA-3
(CD58) could not be detected in the cytoplasm or on the surface. Our results indicate that cytokine-induced myotubes can participate in immune interactions with T lymphocytes.

11/3,AB/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 1999 BIOSIS. All rts. reserv.

07558913 BIOSIS NO.: 000040093522
IMMUNOINHIBITORY ACTIVITY OF CLASS II MHC GENES
AUTHOR: MITCHISON A
AUTHOR ADDRESS: DEUTSCHES RHEUMA FORSCHUNGSZENTRUM BERLIN, AM KLEINEN WANNSEE 5, D-1000 BERLIN 39, GER.
JOURNAL: SYMPOSIUM ON SELF REACTIVITY AND ITS REGULATION HELD AT THE 20TH
ANNUAL MEETING OF THE KEYSTONE SYMPOSIA ON MOLECULAR AND CELLULAR BIOLOGY,
KEYSTONE, COLORADO, USA, JANUARY 17-24, 1991. J CELL BIOCHEM SUPPL 0 (15
PART A). 1991. 231.
CODEN: JCBSD
DOCUMENT TYPE: Meeting
RECORD TYPE: Citation
LANGUAGE: ENGLISH

11/3,AB/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 1999 BIOSIS. All rts. reserv.

04460948 BIOSIS NO.: 000028093989
IMMUNEX SCIENTISTS ISOLATE CLONE AN INTERLEUKIN-2 RECEPTOR PROTEIN
AUTHOR: DICKSON S
JOURNAL: GENET ENG NEWS 4 (6). 1984. 8, 25.
FULL JOURNAL NAME: Genetic Engineering News
CODEN: GENND
RECORD TYPE: Citation
LANGUAGE: ENGLISH

11/3,AB/6 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 1999 Elsevier Science B.V. All rts. reserv.

07914584 EMBASE No: 1999388005
Targeting %%%autoimmune%%% diabetes with %%%gene%%% %%%therapy%%%
Giannoukakis N.; Rudert W.A.; Robbins P.D.; Trucco M.
Dr. M. Trucco, Children's Hospital of Pittsburgh, Rangos Research Center, 3705 Fifth Ave. at DeSoto Street, Pittsburgh, PA 15213 United States
Diabetes (DIABETES) (United States) 1999, 48/11 (2107-2121)
CODEN: DIAEA ISSN: 0012-1797
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 192

The autoimmune nature of insulin-dependent, or type 1, diabetes targets the beta-cells of the pancreas for destruction and results in a lifelong commitment to insulin replacement therapy. Although the number of formulations and dosing of insulin have become more sophisticated and more efficient in recent years, insulin therapy alone is unable to prevent nephropathy, retinopathy, or vascular and heart disease, which still occur in a large number of patients. Different approaches have been attempted to eliminate the requirement of exogenous insulin administration. Historically, these have included pancreatic and islet transplants, which were later combined with treatments intended to halt the destructive process directed against the islets. Despite significant advances made in all of these areas, each approach faces a hostile immunological response that frequently ends with the loss of the islets. Gene therapy-based approaches add a new dimension to the efforts aimed at specifically blocking the immunological attack against the islets in genetically at-risk individuals (autoimmunity) or the immunological response against transplanted allogeneic islets (rejection). This new technology may have an important role in the therapy and cure of type 1 diabetes.

11/3,AB/7 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 1999 Elsevier Science B.V. All rts. reserv.

07764291 EMBASE No: 1999247328
Telesymposia proceedings(R): Innovative therapies for rheumatoid arthritis September 30, 1998: Introduction
Vane J.
J. Vane, William Harvey Research Institute, St. Bartholomew's, Royal London Sch. of Medicine/Dent., Charterhouse Square, London EC1M 6BQ United Kingdom
Drugs of Today (DRUGS TODAY) (Spain) 1999, 35/4-5 (223-224)
CODEN: MDACA ISSN: 0025-7656
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH

11/3,AB/8 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 1999 Elsevier Science B.V. All rts. reserv.

07700841 EMBASE No: 1999184625
Prevention of %%%autoimmune%%% diabetes by intramuscular %%%gene%%%
%%%therapy%%% with a nonviral vector encoding an inteferon-gamma receptor/IgG1 fusion protein
Prud'homme G.J.; Chang Y.
G.J. Prud'homme, Department of Pathology, McGill University, 3775 University Street, Montreal, Que. H3A 2B4 Canada
Gene Therapy (GENE THER.) (United Kingdom) 1999, 6/5 (771-777)
CODEN: GETHE ISSN: 0969-7128
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 38

We report on long-term delivery of an interferon-gamma (IFNgamma) inhibitory protein by intramuscular (i.m.) gene therapy. IFNgamma is a cytokine that plays an important role in many inflammatory disorders, including autoimmune insulin-dependent diabetes mellitus (IDDM) in NOD mice
and (in various strains) multiple low-dose streptozotocin (STZ)-induced diabetes (MDSD). By cDNA insertion into plasmid VICAL VR-1255 we constructed an expression vector encoding a soluble IFNgamma receptor/IgG1
heavy chain (all murine) fusion protein (IFNgammaR/IgG1). This protein is secreted as a homodimer and neutralizes IFNgamma in vitro. We show that i.m. injections of this vector as naked DNA in mice results in secretion of IFNgammaR/IgG1, with serum levels exceeding 100 ng/ml for months after treatment. These levels are sufficient to neutralize IFNgamma in vivo, and to prevent either MDSD or cyclophosphamide (CYP)-accelerated diabetes in NOD mice, which are both characterized by systemic release of IFNgamma.

In
these diseases gene therapy considerably reduces inflammation in the islets of Langerhans (insulitis). Also, circulating IFNgammaR/IgG1 blocked IFNgamma-enhanced nitric oxide production by peritoneal macrophages. The fusion protein is constructed from non-immunogenic self elements, avoiding a neutralizing immune response and making it suitable for prolonged therapy of numerous inflammatory disorders.

11/3,AB/9 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

07636485 EMBASE No: 1999123523
11th International Symposium on Molecular Biology of Hematopoiesis, Bormio, Italy, June 25-29 1998: Preface
Abraham N.G.
Acta Haematologica (ACTA HAEMATOL.) (Switzerland) 1999, 101/2 (67)
CODEN: ACHAA ISSN: 0001-5792
DOCUMENT TYPE: Journal; Editorial
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 0

11/3,AB/10 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

07602725 EMBASE No: 1999102506
Sjogren's syndrome in mice carrying the lpr(cg) gene and the therapeutic efficacy of an immunosuppressive agent FK506
Yang J.; Shikata N.; Yasuda T.; Matsuzawa A.; Tsubura A.
Dr. A. Tsubura, Department of Pathology, Kansai Medical University, Moriguchi, Osaka 570-8506 Japan
AUTHOR EMAIL: tsubura@takii.kmu.ac.jp
Pathology International (PATHOL. INT.) (Japan) 1999, 49/2 (133-140)
CODEN: PITEE ISSN: 1320-5463
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 32

The influence of the Ipr(cg) gene on the development of Sjogren's syndrome was followed up to 5 months of age in male and female mice of MRL,
CBA and Cinf 3H strains. In MRL-lpr(cg) mice, focal mononuclear cell infiltration started at 2 months and became conspicuous after 3 months of age in the lacrimal and submandibular glands but was minimal in the parotid and sublingual glands, even at 5 months of age, without any apparent sex effects found. In CBA and Cinf 3H mice carrying the Ipr(cg) gene, this manifestation of Sjogren's syndrome was much less prominent, indicating that the participation of some genes of the MRL strain may be indispensable for the development of Sjogren's syndrome in mice carrying this gene. In MRL-Ipr(cg) mice, an immunosuppressive agent, FK506, improved the serological abnormalities (decreased levels of anti-double-stranded DNA antibody of IgG2a and IgG3 subclasses) and proteinuria. It also reduced the manifestations of Sjogren's syndrome when it was intraperitoneally administered three times weekly at a dose of 2 mg/kg from 6 weeks (before disease onset) until 5 months of age (the termination of the experiment). Although Vbeta8.2sup + T cells have been demonstrated to be responsible for causing several autoimmune diseases, the selective deletion of Vbeta8.2sup + T cells with the superantigen encoded by mouse mammary tumor virus did not affect the disease severity at all, suggesting that this T cell repertoire may not play a crucial role in induction of Sjogren's syndrome.

11/3,AB/11 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

07543368 EMBASE No: 1999038418
Modulation of autoimmune disease in the MRL-lpr/lpr mouse by IL-2 and TGF-betainf 1 gene therapy using attenuated Salmonella typhimurium as gene carrier
Huggins M.L.; Huang F.-P.; Xu D.; Lindop G.; Stott D.I.
Dr. M.L. Huggins, Dept. Clinical Laboratory Sciences, University Hospital, Queen's Medical Centre, Nottingham NG7 2UH United Kingdom
Lupus (LUPUS) (United Kingdom) 1999, 8/1 (29-38)
CODEN: LUPUE ISSN: 0961-2033
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 37

We have investigated the effects of interleukin-2 (IL-2) and transforming growth factor-beta (TGF-beta) gene therapy on the progress of autoimmune disease in MRL-lpr/lpr mice, a murine model of systemic lupus erythematosus (SLE). These mice have uncontrolled proliferation of T cells, an impaired response to T cell mitogen and produce autoantibodies against nuclear antigens, including DNA. Immune complexes formed by these autoantibodies are believed to cause glomerulonephritis and vasculitis in lupus mice and human SLE. Since there is an imbalance of cytokine production in both SLE patients and lupus mice, we examined the effects of cytokine gene therapy on the progression of autoimmune disease in MRL-lpr/lpr mice. The mice were
treated orally with a nonpathogenic strain of Salmonella typhimurium bearing the aroAsup - aroDsup - mutations and carrying the murine genes encoding IL-2 and TGF-beta. The bacteria synthesise and slowly release the cytokines in vivo. Our results show that, contrary to expectation, TGF-beta gene therapy produced no improvement in pathology and generally had opposite effects to those of IL-2. IL-2 gene therapy restored the defective T cell proliferative response to mitogen and suppressed the autoantibody response, glomerulonephritis and growth of lymphoid tumours.

11/3,AB/12 (Item 7 from file: 73)
DIALOG(R)File 73:EMBASE

07483532 EMBASE No: 1998238575
Retroviral expression of MUC-1 human tumor antigen with intact repeat structure and capacity to elicit immunity in vivo
Henderson R.A.; Konitsky W.M.; Barratt-Boyes S.M.; Soares M.; Robbins P.D.; Finn O.J.
Dr. O.J. Finn, W1142 Biomedical Science Tower, Univ. of Pittsburgh Sch. of Medicine, Pittsburgh, PA 15261 United States
Journal of Immunotherapy (J. IMMUNOTHER.) (United States) 1998, 21/4
(247-256)
CODEN: JOIME ISSN: 1053-8550
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 33

MUC-1 mucin is an epithelial cell antigen whose aberrant expression plays a role in autoimmunity and tumor immunity and is thus an attractive candidate for immunotherapy or gene therapy. Because the MUC-1 cDNA is composed almost entirely of 60-bp tandem repeats and is susceptible to homologous recombination, it presents a special challenge to cloning and expression in viral vectors. Nevertheless, we have been successful in constructing a retroviral vector (MFG-MUC-1) with a 22-tandem repeat MUC-1
cDNA. Both stable and transient packaging cell lines are capable of producing high-titer retroviruses that can transfer the expression of MUC-1 to murine 3T3 cells. Transduced cells express uniformly high levels of MUC-1 on their surface, and western blot analysis reveals that the molecule expressed is of full length and extensively glycosylated. We have used the MFG-MUC-1 vector to stably transduce an immortalized murine dendritic cell
line and show that immunization of mice with transduced cells elicits specific immune responses to mucin. The ability of this vector to transfer expression of the MUC-1 tumor antigen to potent antigen-presenting cells is expected to be of use in the immunotherapy of epithelial cancers.

11/3,AB/13 (Item 8 from file: 73)
DIALOG(R)File 73:EMBASE

07277446 EMBASE No: 1998177998
Antigen processing/presenting and oncogenesis
Abdelnoor A.M.
A.M. Abdelnoor, Dept. of Microbiology and Immunology, Faculty of Medicine, American University of Beirut, Beirut Lebanon
Critical Reviews in Oncogenesis (CRIT. REV. ONCOG.) (United States) 1997, 8/4 (381-393)
CODEN: CRONE ISSN: 0893-9675

DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 101

It has been established in recent years that a number of tumor cell types express tumor antigens, yet the host's immune system fails to recognize them. The antigen processing/presenting machinery, which plays a crucial role in generating an immune response, and possible causes for its inability of processing/presenting tumor antigens are reviewed. These causes are related to the expression of major histocompatibility complex molecules, costimulatory molecules, and tumor antigens by tumor cells, and the types of cytokines produced. Therapeutic measures include transfecting tumor cells with genes that encode major histocompatibility complex and costimulatory molecules, cytokines, and tumor antigens. In addition, tumor peptide vaccines are evaluated. However, developing an immune response to tumor antigens carries with it the risk of autoimmune disease.

11/3,AB/14 (Item 9 from file: 73)
DIALOG(R)File 73:EMBASE

06940472 EMBASE No: 1997224983
Scientific and political impediments to successful islet transplantation
Weir G.C.; Bonner-Weir S.
Dr. G.C. Weir, Research Division, Joslin Diabetes Center, One Joslin Place, Boston, MA 02215 United States
AUTHOR EMAIL: weirg@joslab.harvard.edu
Diabetes (DIABETES) (United States) 1997, 46/8 (1247-1256)
CODEN: DIAEA ISSN: 0012-1797
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 110

Islet transplantation is a treatment for diabetes that has the potential to normalize glucose levels and prevent the development of complications. In spite of the simplicity of the concept and the urgent need to provide such a treatment to patients, there has been a frustrating lack of progress. This perspective delves into the scientific and political impediments to success. The scientific barriers are the need to find a satisfactory source of insulin-producing tissue and the requirement to prevent this tissue from being destroyed by immune rejection and autoimmunity. The problems and potential of allografts, xenografts, and the development of cell lines are discussed. Multiple approaches to the prevention of immune destruction are considered, including immunobarrier devices, immunosuppression, development of tolerance, and genetic manipulation. The political barriers discussed include the problems of high expectations, the controversy surrounding targeted research, the balance between basic and applied research, the roles of industry and academia, the concerns about xenotransplantation, and the difficulties in developing a planned approach to the problem.

11/3,AB/15 (Item 10 from file: 73)
DIALOG(R)File 73:EMBASE

06936020 EMBASE No: 1997220520
Modulation of the autoimmune response in lupus mice by oral administration of attenuated Salmonella typhimurium expressing the IL-2 and TGF-beta genes
Huggins M.L.; Huang F.-P.; Xu D.; Lindop G.; Stott D.I.
D.I. Stott, University Department of Immunology, Western Infirmary, Glasgow G11 6NT United Kingdom
Annals of the New York Academy of Sciences (ANN. NEW YORK ACAD. SCI.) (
United States) 1997, 815/- (499-502)
CODEN: ANYAA ISSN: 0077-8923
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 6

11/3,AB/16 (Item 11 from file: 73)
DIALOG(R)File 73:EMBASE

06873470 EMBASE No: 1997157798
Biotechnological agents for the immunotherapy of multiple sclerosis. Principles, problems and perspectives
Hohlfeld R.
Dr. R. Hohlfeld, Department of Neurology, Klinikum Grosshadern, Ludwig Maximilians-University, Marchioninistrasse 15, D-81366 Munich Germany
Brain (BRAIN) (United Kingdom) 1997, 120/5 (865-914)
CODEN: BRAIA ISSN: 0006-8950
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 480

Based on exciting results in animal models, a number of novel immunotherapies employing biotechnological products, rather than conventional immunosuppressants, are being developed for the treatment of multiple sclerosis. The first part of this article is a review of some fundamental concepts of immunology and offers a hypothetical scenario for the immunopathogenesis of multiple sclerosis. The second part provides a critical overview of various immunotherapies relying on modern biotechnology. For each approach, the underlying immunological principles, experimental and clinical evidence, and foreseeable problems are separately addressed. Thus, it is hoped that this article serves a dual purpose, namely to provide an update on recent advances in immunology, and to serve as a useful source of reference to immunotherapies holding promise for future treatment of multiple sclerosis.

11/3,AB/17 (Item 12 from file: 73)
DIALOG(R)File 73:EMBASE

06470840 EMBASE No: 1996133519
Regulation of MHC class II genes: Lessons from a disease
Mach B.; Steimle V.; Martinez-Soria E.; Reith W.
Jeantet Lab. of Molecular Genetics, Department of Genetics/Microbiology, University of Geneva Medical School,1211 Geneva Switzerland
Annual Review of Immunology (ANNU. REV. IMMUNOL.) (United States) 1996
, 14/- (301-331)
CODEN: ARIMD ISSN: 0732-0582
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Precise regulation of major histocompatibility complex class II (MHC-II) gene expression plays a crucial role in the control of the immune response. A major breakthrough in the elucidation of the molecular mechanisms involved in MHC-II regulation has recently come from the study of patients that suffer from a primary immunodeficiency resulting from regulatory defects in MHC-II expression. A genetic complementation cloning approach has led to the isolation of CIITA and RFX5, two essential MHC-II gene transactivators. CIITA and RFX5 are mutated in these patients, and the wild-type genes are capable of correcting their defect in MHC-II expression. The identification of these regulatory factors has furthered our understanding of the molecular mechanisms that regulate MHC-II genes. CIITA was found to be a non-DNA binding transactivator that functions as a molecular switch controlling both constitutive and inducible MHC-II expression. The finding that RFX5 is a subunit of the nuclear RFX-complex has confirmed that a deficiency in the binding of this complex is indeed the molecular basis for MHC-II deficiency in the majority of patients. Furthermore, the study of RFX has demonstrated that MHC-II promoter activity is dependent an the binding of higher-order complexes that are formed by highly specific cooperative binding interactions between certain MHC-II promoter-binding proteins. Two of these proteins belong to families of which the other members, although capable of binding to the same DNA motifs, are probably not directly involved in the control of MHC-II expression. Finally, the facts that CIITA and RFX5 are both essential and highly specific for MHC-II genes make possible novel strategies designed to achieve immunomodulation via transcriptional intervention.

11/3,AB/18 (Item 13 from file: 73)
DIALOG(R)File 73:EMBASE

06461190 EMBASE No: 1996127895
Prospects for treating autoimmune and inflammatory diseases by gene therapy
Robbins P.D.; Evans C.H.
Dept. Molecular Genetics Biochem., University of Pittsburg, School of

Medicine,Pittsburgh, PA 15261 United States
Gene Therapy (GENE THER.) (United Kingdom) 1996, 3/3 (187-189)
CODEN: GETHE ISSN: 0969-7128
DOCUMENT TYPE: Journal; Editorial
LANGUAGE: ENGLISH

11/3,AB/19 (Item 14 from file: 73)
DIALOG(R)File 73:EMBASE

06323178 EMBASE No: 1995358974
Prevention of autoimmune disease by retroviral-mediated gene therapy
Ally B.A.; Hawley T.S.; McKall-Faienza K.J.; Kundig T.M.; Oehen S.U.; Pircher H.; Hawley R.G.; Ohashi P.S.
Medical Biophysics/Immunology Dept., Ontario Cancer Institute, 610 University Avenue,Toronto, Ont. M5G 2C1 Canada
Journal of Immunology (J. IMMUNOL.) (United States) 1995, 155/11 (5404-5408)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

T lymphocytes have been implicated in a variety of autoimmune diseases, and therefore one potential therapeutic approach would be to tolerize the pathogenic self-reactive T cells. In this study, we examined whether retroviral gene therapy could be used to induce tolerance and prevent autoimmunity using a transgenic mouse model for experimentally induced diabetes. In this model, the lymphocytic choriomeningitis virus (LCMV) glycoprotein (gp) is expressed on the beta-islet cells of the pancreas under the control of the rat insulin promoter (RIP). Previous work showed that the T cells specific for the gp remain unaware of the transgenic gp Ag expressed by the islet cells, and infection with LCMV leads to immune-mediated diabetes. To tolerize the gp-specific pathogenic T cells, a retroviral vector (RV) expressing the LCMV gp was constructed, RV-gp. Replication-defective recombinant retroviruses were used to transduce bone marrow cells, which were subsequently infused into host RIP-gp transgenic animals. Unlike control animals, RV-gp chimeric animals did not possess T cells specific for the gp Ag as measured by proliferation and cytotoxic function, and further analysis suggested that tolerance of the gp-specific self-reactive T cells occurred by clonal deletion. Further experiments demonstrated that chimeric RIP-gp transgenic animals generated using bone marrow transduced with RV-gp did not develop experimentally induced diabetes. Our animal model demonstrates that retroviral gene therapy may cure immune-mediated diabetes by providing long lasting Ag-specific tolerance.

11/3,AB/20 (Item 15 from file: 73)
DIALOG(R)File 73:EMBASE

05762982 EMBASE No: 1994163086
The immunobiology of muscle
Hohlfeld R.; Engel A.G.
Department of Neuroimmunology, Max Planck Institute,D-82152 Martinsried
Germany
Immunology Today (IMMUNOL. TODAY) (United Kingdom) 1994, 15/6 (269-274)
CODEN: IMTOD ISSN: 0167-5699
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Skeletal muscle can he both the site and target of immune reactions. Here, Reinhard Hohlfeld and Andrew Engel consider the role of muscle as an immunological microenvironment and discuss the immunological properties of
human muscle cells. Furthermore, they provide a brief overview of autoimmune diseases of muscle and of other conditions in which intramuscular immune reactions play a role. Finally, they discuss the immunological problems of novel gene therapies that rely on muscle cells as vehicles for gene transfer.

11/3,AB/21 (Item 16 from file: 73)
DIALOG(R)File 73:EMBASE

05521969 EMBASE No: 1993290068
Murine models of autoimmune disease and Sjogren's syndrome
Mountz J.D.; Gause W.C.
Clin. Immunology/Rheumatology Div., Department of Medicine, University of
Alabama, 701 South 19th Street,Birmingham, AL 35294-0007 United States
Current Opinion in Rheumatology (CURR. OPIN. RHEUMATOL.) (United States
) 1993, 5/5 (557-569)
CODEN: CORHE ISSN: 1040-8711
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

11/3,AB/22 (Item 17 from file: 73)
DIALOG(R)File 73:EMBASE

05334761 EMBASE No: 1993102846
The T cell receptor gene and its association with human diseases
Klig S.; Chiaramonte L.; Verma R.S.
Division of Genetics, Long Island College Hospital, Hicks St. at Atlantic Avenue,Brooklyn, NY 11201 United States
Experimental and Clinical Immunogenetics (EXP. CLIN. IMMUNOGENET.) (
Switzerland) 1993, 9/3 (117-124)
CODEN: ECIME ISSN: 0254-9670
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

The genetic organization and protein structure of the T cell receptor (TCR)/CD3 complex are currently under investigation, and recent work has provided information about its assembly, expression and function. This article reviews what is currently known about the structure and assembly of the TCR/CD3 complex. The TCR chains are members of the immunoglobulin gene
superfamily and are generated by combinatorial associations of V, J, D, and C genes. The presence of certain gene rearrangements within these chains has been associated with lymphoproliferative disorders, autoimmune disease and immunodeficiencies. TCR rearrangements can be useful in the diagnosis of lymphoproliferative disorders and in the identification of patients who will subsequently relapse, once in remission. With respect to autoimmune disease, the possibility now exists of immunotherapy with TCR designer polypeptides to prevent disease. In patients with primary immunodeficiencies secondary to defects in expression of the TCR, the possibility of somatic gene therapy now exists. As more information unfolds about the role that TCR gene rearrangements have in various diseases, new insights are gained into better diagnosis and treatment.

11/3,AB/23 (Item 18 from file: 73)
DIALOG(R)File 73:EMBASE

04169472 EMBASE No: 1990052014
Genetically engineered animals: implication for human diseases
Hooper M.L.
Department of Pathology, University of Edinburgh, Teviot Place, Edinburgh EH8 9AG United Kingdom
Biofutur (BIOFUTUR) (France) 1990, -/86 (30-35)
CODEN: BIOFE ISSN: 0294-3506
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH

11/3,AB/24 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09963078 99207797
Immunotherapy.
Lord GM
Imperial College School of Medicine, Hammersmith Hospital, London.
J R Coll Physicians Lond (ENGLAND) Jan-Feb 1999, 33 (1) p61-4, ISSN
0035-8819 Journal Code: JVB
Languages: ENGLISH

Document type: CONGRESSES
A forward looking conference took place at the Royal College of Physicians in June 1998. The audience, which included many scientific and clinical immunologists from both the university and pharmaceutical sector, participated knowledgeably and critically in the discussions on possible future treatments for immunologically caused diseases and on the scientific principles which may bring about further developments in immunotherapy.

11/3,AB/25 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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09722257 98392058
A gene therapy approach to treatment of autoimmune disease.
Seroogy CM; Fathman CG
Department of Medicine, Stanford University School of Medicine, CA 94305-5111, USA. cseroogy@leland.stanford.edu
Immunol Res (UNITED STATES) Aug 1998, 18 (1) p15-26, ISSN 0257-277X
Journal Code: IMR
Contract/Grant No.: DK-39959, DK, NIDDK; AI-39646, AI, NIAID;
NO1-AR-62227, AR, NIAMS
Languages: ENGLISH
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL
New insights into the underlying mechanisms for the development of autoimmune diseases in humans and various animal models continue to increase with our understanding of factors that drive polarization of T helper (Th) responses and tolerance. This information has led to the development of new treatment strategies, including oral tolerance clinical trails and the use of altered peptide ligands in animal models. These approaches have shown some promise and provided additional insight into the disease processes. The use of gene therapy in many disease states continues to increase. We are starting to see the application of gene therapy in chronic diseases in humans. Gene therapy has been used in several animal models of autoimmune disease with promising preliminary results. In this article, an overview will be provided for the use of gene therapy in autoimmune disease.

11/3,AB/26 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 1999 Dialog Corporation. All rts. reserv.

09701548 98451613
Amelioration of lymphoid hyperplasia and hypergammaglobulinemia in lupus-prone mice (gld) by Fas-ligand gene transfer.
Hong NM; Masuko-Hongo K; Sasakawa H; Kato T; Shirai T; Okumura K;
Nishioka K; Kobata T
Institute of Medical Science, St Marianna University School of Medicine, Kawasaki, 216, Japan.
J Autoimmun (ENGLAND) Aug 1998, 11 (4) p301-7, ISSN 0896-8411
Journal Code: ADL
Languages: ENGLISH
Document type: JOURNAL ARTICLE
We recently demonstrated that the transplantation of wild-type bone marrow cells into lupus-prone mice (gld), resulted in the normalization of autoimmune syndromes due to induction of direct elimination of pathogenic cells by apoptosis via Fas/Fas ligand (L) interactions. This finding supports the beneficial therapeutic effect of Fas-mediated apoptosis on autoimmunity in gld mice. To further establish the therapeutic effect of Fas-mediated apoptosis on autoimmunity, we investigated the effect of cells transfected with the FasL gene on autoimmune symptoms in gld mice. The FasL
transfectants exhibited cytotoxic activity against gld splenocytes via the Fas/FasL system in vitro. In vivo administration of irradiated-FasL transfectants induced a reduction in hypergammaglobulinemia, the disappearance of lymphoid hyperplasia and of the accumulation of gld cells (B220+ T-cells). Furthermore, in situ nick end labelling analysis revealed that cells in the spleen and lymph nodes frequently underwent apoptosis. These results clearly indicate that FasL transfectants induce the apoptosis of the pathogenic cells responsible for hypergammaglobulinemia and lymphoid
hyperplasia in gld mice by cell/cell interaction via the Fas/FasL system. Thus, ex vivo gene transfer of FasL may represent a new therapeutic strategy for autoimmunity caused by the FasL dysfunction. Copyright 1998 Academic Press

11/3,AB/27 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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09656030 98358875
Effect of genetic background on Ea(d) transgene-mediated protection from murine lupus.
Iwamoto M; Ibnou-Zekri N; Kobayakawa T; Izui S
Department of Pathology, Centre Medical Universitaire, University of Geneva, Switzerland.
J Autoimmun (ENGLAND) Jun 1998, 11 (3) p241-8, ISSN 0896-8411
Journal Code: ADL
Languages: ENGLISH
Document type: JOURNAL ARTICLE
The expression of a transgenic encoding the I-E alpha-chain, Ea(d), is highly effective in the protection from systemic lupus erythematosus (SLE) in BXSB and (MRL x BXSB)F1 male mice, in which a mutant gene, Yaa (Y-linked
autoimmune acceleration), plays a critical role. To gain further insight into the protective role of the Ea(d) transgene, we compared the effect of the transgene in two additional lupus-prone (NZB x BXSB)F1 and (NZW x
BXSB)F1 hybrid mice, in which both F1 female mice develop typical SLE in
the absence of the Yaa gene and their F1 males bearing the Yaa gene develop a more accelerated form of SLE. Comparative analysis of the clinical development of SLE in these F1 hybrid mice showed that Ea(d) transgene expression was much more effective in the protection from SLE occurring in the F1 females than in their male counterparts. Our results indicate that the Ea(d) transgene is capable of preventing SLE by inhibiting autoimmune responses, independently of the Yaa gene-accelerating effect, and that its protective capacity is strongly influenced by the genetic susceptibility to SLE in individual strains of lupus-prone mice. In addition, this autoimmune inhibitory effect was shown to be selective for IgG, but not IgM, anti-DNA autoantibody production, and is more specific for anti-gp70 autoantibody than for anti-DNA autoantibody. These results favour the hypothesis that the transgene expression may lead to the modulation of self-peptide presentation, thereby preventing excessive T-cell-dependent activation of autoreactive B cells.

11/3,AB/28 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 1999 Dialog Corporation. All rts. reserv.

09556020 98304306
Gene therapy in autoimmune diseases.
Evans CH; Whalen JD; Evans CH; Ghivizzani SC; Robbins PD
Department of Orthopaedic Surgery, University of Pittsburgh School of Medicine, PA, USA.
Ann Rheum Dis (ENGLAND) Mar 1998, 57 (3) p125-7, ISSN 0003-4967
Journal Code: 62W
Languages: ENGLISH
Document type: JOURNAL ARTICLE

11/3,AB/29 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 1999 Dialog Corporation. All rts. reserv.

09485035 98201089
Gene therapy in the treatment of autoimmune disease.
Mathisen PM; Tuohy VK
Dept of Immunology, Lerner Research Institute, Cleveland Clinic Foundation, OH 44195, USA. mathisp@cesmtp.ccf.org
Immunol Today (ENGLAND) Mar 1998, 19 (3) p103-5, ISSN 0167-5699
Journal Code: AEA
Languages: ENGLISH
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

11/3,AB/30 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06659848 90326158
Recovery from autoimmunity of MRL/lpr mice after infection with an interleukin-2/vaccinia recombinant virus.
Gutierrez-Ramos JC; Andreu JL; Revilla Y; Vinuela E; Martinez C
Centro de Biologia Molecular del CSIC, Universidad Autonoma de Madrid,
Spain.
Nature (ENGLAND) Jul 19 1990, 346 (6281) p271-4, ISSN 0028-0836
Journal Code: NSC
Languages: ENGLISH
Document type: JOURNAL ARTICLE
Interleukin-2 (IL-2) is a T-cell derived molecule implicated in the clonal expansion of antigen-activated T cells and in T-cell development. IL-2 is also implicated in autoimmune disease, although its role is still controversial. Murine systemic lupus erythematosus (SLE) is a good model for human SLE as most of the immunological abnormalities in the human disease also seem to be operative in the mouse. Among SLE mice, the MRL/lpr
strain develops early in life autoimmune diseases such as immune complex-mediated glomerulonephritis, arthritis and arteritis. Lymphoid abnormalities associated with those diseases in this strain are thymic atrophy and abnormal proliferation of CD3+ CD4- CD8- 'double-negative' T
cells, resulting in massive generalized lymph node enlargement. We have therefore now examined the effects of IL-2 on the disease progression in MRL/lpr mice using live vaccinia recombinant viruses expressing the human IL-2 gene. Vaccinated mice showed prolonged survival, decreased autoantibody and rheumatoid factor titres, marked attenuation of kidney interstitial infiltration and intraglomerular proliferation, as well as clearance of synovial mononuclear infiltrates. Inoculation with the IL-2/vaccinia recombinant virus led, in addition, to drastic reduction of the double-negative T-cell population, improved thymic differentiation and restoration of normal values of mature cells in peripheral lymphoid organs.

11/3,AB/31 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0245225 DBA Accession No.: 1999-15326 PATENT
Treating diseases (especially diabetes ad autoimmune diseases) using transplanted Sertoli cells and co-localized cells producing biological factors - e.g. pancreas islet cell secreting insulin or transformed cell expressing a hormone
AUTHOR: Selawry H P
CORPORATE SOURCE: Tucson, AZ, USA.
PATENT ASSIGNEE: Res.Corp.Technol. 1999
PATENT NUMBER: US 5958404 PATENT DATE: 19990928 WPI
ACCESSION NO.:
1999-561003 (1947)
PRIORITY APPLIC. NO.: US 660258 APPLIC. DATE: 19960607
NATIONAL APPLIC. NO.: US 660258 APPLIC. DATE: 19960607
LANGUAGE: English
ABSTRACT: A method (I) for treating mammalian diseases (e.g. diabetes mellitus) caused by deficiencies in biological factors (e.g. insulin) by transplanting Sertoli cells (SCs) to form an immunologically privileged site) and cells (CBFs) which produce the biological factor required is claimed. Also claimed are: a modified method for treating mammal diabetes mellitus involving transplanting SCs to form an immunologically privileged site and pancreatic islet of Langerhans cells; a method for treating autoimmune diseases involving transplanting SCs to affected sites other than the testes; and a method for enhancing the recovery and proliferation of ex vivo cells by co-culturing them with SCs. (I) may be used for therapy of type I and type II diabetes mellitus and autoimmune disease. The transplanted cells have increased survival in vivo. The SCs produce cell stimulatory factors, which enhance the maturation, proliferation and functional capacity of the cells to produce an immunologically privileged site. The biological factor is a hormone, especially insulin and the CBFs are pancreas islet cells or transformed cells expressing the hormone. (30pp)

11/3,AB/32 (Item 2 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0245095 DBA Accession No.: 1999-15196 PATENT
New nucleic acid encoding the MU-1 hematopoietin receptor protein, used for
treating e.g. cancer, autoimmune disease or abnormal hematopoiesis - recombinant protein production via vector-mediated gene transfer and expression in host cell and antibody for therapy and gene therapy
AUTHOR: Donaldson D; Ungar M
CORPORATE SOURCE: Cambridge, MA, USA.
PATENT ASSIGNEE: Genet.Inst.Cambridge-Massachusetts 1999
PATENT NUMBER: WO 9947675 PATENT DATE: 19990923 WPI
ACCESSION NO.:
1999-562115 (1947)
PRIORITY APPLIC. NO.: US 40005 APPLIC. DATE: 19980317
NATIONAL APPLIC. NO.: WO 99US5854 APPLIC. DATE: 19990317
LANGUAGE: English
ABSTRACT: A nucleic acid (I) which encodes the MU-1 hematopoietin receptor
protein and has a 2,665 bp DNA sequence (SI) (specified) that encodes a 538 amino acid protein sequence (SII) (specified), is new. Also claimed are: host cells transformed with (I); the recombinant production of the MU-1 protein (II) by culturing the transformed host cells; (II) which is encoded by (SII) or its amino acids residues 22-538, 22-236 or 1-236 fragments, or any fragment of these which MU-1 biological activity; a composition containing (II) and a suitable carrier; the proteins produced using the above culturing method; a composition containing antibodies specific for (II); and an isolated nucleic acid which encodes (II). (II) may be useful for raising specific antibodies, for screening for specific binding agents, as assay reagents, tissue markers, etc. and therapeutically, with (I) optionally being useful for gene therapy. The above products may be specifically useful for treating cancer, autoimmune diseases and for preventing transplant rejection. (37pp)

11/3,AB/33 (Item 3 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0245083 DBA Accession No.: 1999-15184 PATENT
New isolated cytokine receptor common gamma-chain-like polypeptides, used
for treating, e.g. immune and autoimmune diseases - recombinant protein production via vector-mediated gene transfer and expression in host cell for disease diagnosis, therapy and gene therapy
AUTHOR: Ruben S M; Rosen C A; Moore P A
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: Hum.Genome-Sci. 1999
PATENT NUMBER: WO 9947538 PATENT DATE: 19990923 WPI
ACCESSION NO.:
1999-562048 (1947)
PRIORITY APPLIC. NO.: US 86505 APPLIC. DATE: 19980522
NATIONAL APPLIC. NO.: WO 99US5068 APPLIC. DATE: 19990305
LANGUAGE: English
ABSTRACT: Isolated cytokine receptor common gamma-chain-like (CRCGCL)
proteins, are new. Nucleic acid molecules with polynucleotides which have at least 95% DNA sequence identity with polynucleotide fragments of a 573 (I) or 371 (II) amino acid protein sequence (both specified) (deposited under ATCC 209641 or 209691). Also claimed are: a recombinant vector containing the above nucleic acid molecule; making a recombinant host cell which contains the nucleic acid molecule via transformation with the vector; a recombinant host cell produced using this method; an isolated polynucleotide which has a protein sequence at least 95% identical (II); an isolated antibody which is specific for the isolated protein; a recombinant host cell which expresses the isolated recombinant proteins. These new proteins, designated CRCGCL, may be useful for the treatment, prophylaxis and diagnosis of immune and autoimmune diseases such as lupus, transplant rejection, allergic reaction, arthritis, asthma, leukemia, and AIDS. The products may also be useful for the detection and construction of transgenic animals. (148pp)

11/3,AB/34 (Item 4 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0244394 DBA Accession No.: 1999-12541 PATENT

Polynucleotides encoding ANTS1 and ANTS2, useful for treating disorders associated with apoptosis, inflammation and cell proliferation - human recombinant ANTS-1 and ANTS-2 protein and DNA probe, useful for the diagnosis and therapy of e.g. cancer, autoimmune disease and inflammatory disease
AUTHOR: Lal P; Bandman O; Corley N C; Shah P
CORPORATE SOURCE: Palo Alto, CA, USA.
PATENT ASSIGNEE: Incyte-Pharm. 1999
PATENT NUMBER: US 5932443 PATENT DATE: 19990803 WPI ACCESSION NO.:
1999-443596 (1937)
PRIORITY APPLIC. NO.: US 937972 APPLIC. DATE: 19970926
NATIONAL APPLIC. NO.: US 937972 APPLIC. DATE: 19970926
LANGUAGE: English
ABSTRACT: Isolated and purified DNA sequences (I) encoding human ANTS-1 and
ANTS-2 proteins (II) are claimed. Also claimed are: DNA probes specific for (I); complements of (I); expression vectors and host cells comprising (I); and a method of detecting (I) using the DNA probe. (I), (II), agonists and antagonists e.g. antisense sequences may be used for the therapy and gene therapy of cancers, disorders associated with increased apoptosis and inflammatory diseases. (36pp)

11/3,AB/35 (Item 5 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0243935 DBA Accession No.: 1999-14700 PATENT
Inducing enhanced therapeutically effective immune response, useful for treating cancer, allergic disease and/or autoimmune disease - topical administration of a vaccine or nucleic acid vaccine following pretreatment to enhance skin penetration
AUTHOR: Glenn G M; Alving C B
CORPORATE SOURCE: Washington, DC, USA.
PATENT ASSIGNEE: Iomai 1999
PATENT NUMBER: WO 9943350 PATENT DATE: 19990902 WPI ACCESSION NO.:
1999-527536 (1944)
PRIORITY APPLIC. NO.: US 75856 APPLIC. DATE: 19980225
NATIONAL APPLIC. NO.: WO 99US4128 APPLIC. DATE: 19990225
LANGUAGE: English
ABSTRACT: A means of inducing an enhanced immune response in a patient is
claimed. It involves topical application of at least one antigen and at least one adjuvant, after pretreatment of the skin where application occurs. Also claimed are similar methods of inducing an enhanced therapeutically effective immune response, an article used for vaccine administration, a means of treating, preventing or protecting a subject from exposure to an antigen, and a composition containing at least one antigen and adjuvant, along with a substance that enhances skin penetration. This is used as a vaccine in the treatment of cancer, allergic disease and autoimmune disease. The antigen is particularly a tumor antigen, and induces antibody and cytotoxic T-lymphocyte production and lymphocyte proliferation. Pretreatment of the skin involves applying a surfactant solution, a depilatory composition and a keratinolytic formulation before disrupting the surface layer. The adjuvant is preferably bacterial DNA, CpG cytokines, chemokines, tumor necrosis factor, protein engineered toxins, or lipopolysaccharides. The antigen is preferably a nucleic acid encoding an antigen. (116pp)

11/3,AB/36 (Item 6 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0243687 DBA Accession No.: 1999-14452 PATENT
Podocalyxin-like protein, e.g. useful for diagnosing and treating diseases associated with selectin-mediated binding events - human recombinant sialmucin production via vector-mediated gene transfer and expression in host cell for inflammatory disorder and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Rosen S D; Sassetti C M
CORPORATE SOURCE: Oakland, CA, USA.
PATENT ASSIGNEE: Univ.California 1999
PATENT NUMBER: WO 9941363 PATENT DATE: 19990819 WPI ACCESSION NO.:
1999-540131 (1945)
PRIORITY APPLIC. NO.: US 111663 APPLIC. DATE: 19981210
NATIONAL APPLIC. NO.: WO 99US1780 APPLIC. DATE: 19990128
LANGUAGE: English
ABSTRACT: A podocalyxin-like protein (PCLP) (I) which has selectin binding
activity, is new. Also claimed are: an isolated polynucleotide (II) which encodes a PCLP-2 protein; a fragment of (II); a fragment of a PLCP-2 protein; an expression DNA cassette containing (II) and functional transcriptional initiation and termination regions; a cell or its progeny which contain the DNA cassette as an extrachromosomal element or integrated into the genome; the production of recombinant PCLP-2 protein; a monoclonal antibody specific for PCPL-2; a method for inhibiting a binding event between selectin and a PCLP protein; and a method for modulating chemokine induced recruitment of leukocytes. (I) and (II) may be useful for the diagnosis and treatment (via gene therapy) of disease associated with selection-mediated binding events, including acute and chronic inflammation, autoimmune diseases and tissue rejection. The administration routes for the gene therapy include virus infection and microinjection. (I) is preferably PCLP-2 (a human sialmucin) and it has substantial similarity to a 605 amino acid protein sequence and a 2,269 bp DNA sequence (both specified). (5pp)

11/3,AB/37 (Item 7 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0243669 DBA Accession No.: 1999-14434 PATENT
Isolated nucleic acids encoding chemotactic cytokine-III useful for the prevention, diagnosis and treatment of leukemia, autoimmune diseases and psoriasis and for promoting wound healing - expression in host cell, antibody and DNA probe, used for gene therapy, nucleic acid vaccine and drug screening
AUTHOR: Ni J; Gentz R; Yu G L; Su J; Dillon P J
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: Hum.Genome-Sci. 1999
PATENT NUMBER: US 5952197 PATENT DATE: 19990914 WPI ACCESSION NO.:
1999-527013 (1944)
PRIORITY APPLIC. NO.: US 812003 APPLIC. DATE: 19970305
NATIONAL APPLIC. NO.: US 812003 APPLIC. DATE: 19970305
LANGUAGE: English
ABSTRACT: Nucleic acids (ATCC 97406, 371 bp) encoding chemotactic
cytokine-III proteins (CCIII, 81 amino acids), involved in the control of chemotactic migration and trafficking of cells (e.g. T-lymphocytes, basophils and fibroblasts) are new. Also claimed are: a method of producing recombinant vectors; recombinant vectors; recombinant host cells; and a method of producing the proteins. The nucleic acid sequences can be used as DNA probes and therefore to diagnose conditions associated with inappropriate expression of CCIII. The proteins produced from the nucleic acid either in vitro in fermentation culture or in vivo as part of a gene therapy protocol may be used to treat conditions such as leukemia, tumors, chronic infections, T-lymphocyte-mediated autoimmune diseases, fibrotic disorders, wound healing and psoriasis. The proteins may be used to screen for agonists and antagonists of CCIII activity and as antigens in the production of vaccines and antibodies. The nucleic acids may also be used as genetic vaccines. (26pp)

11/3,AB/38 (Item 8 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0243038 DBA Accession No.: 1999-13803 PATENT
New human proteolytic accessory enzyme and its modulators useful for treating disease conditions like inflammation or autoimmune diseases - human recombinant E3 ubiquitin protein ligase production via vector plasmid-mediated gene transfer and expression in Escherichia coli for diagnosis, therapy and gene therapy
AUTHOR: Hustad C M; Ghildyal N
CORPORATE SOURCE: London, UK.
PATENT ASSIGNEE: Zeneca 1999
PATENT NUMBER: WO 9940201 PATENT DATE: 19990812 WPI ACCESSION NO.:
1999-508506 (1942)
PRIORITY APPLIC. NO.: US 70060 APPLIC. DATE: 19980430

NATIONAL APPLIC. NO.: WO 99GB353 APPLIC. DATE: 19990202
LANGUAGE: English
ABSTRACT: A purified polynucleotide (I) which consists of a DNA sequence
which encodes a human E3 ubiquitin protein ligase (II) with an 852 amino acid protein sequence (specified), or its active biological and/or pharmacological derivative, is new. Also claimed are: an expression vector (III) (e.g. plasmid ppGEX-5x-3) which contains (I); an antisense molecule (IV) which consists of a complement of (I) or its biologically effective portion; a host cell (e.g. Escherichia coli) transformed or transfected with (III); an antibody against (II); the production of recombinant (II) by the culturing the transformed cells; a method for identifying compounds which modulate the biological and/or the pharmacological activity of (II); compounds which modulate the biological and/or pharmacological activity of (II); a pharmaceutical composition containing some of the identified modulates; a diagnostic composition for identifying (II) which contains the antibody; and a diagnostic composition for identifying (I) with a 2,559 bp DNA sequence (specified). The above may be used for diagnosis, therapy and gene therapy of diseases related to the expression of (II), e.g. autoimmune disease. (96pp)

11/3,AB/39 (Item 9 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242646 DBA Accession No.: 1999-13411 PATENT
Expression system containing therapeutic gene and an immunosuppressor gene
useful for treating an MHC-1 autoimmune disease or killing tumor cells - retro virus vector comprising immunosuppressive gene, useful for the gene therapy of major histocompatibility complex class-I-associated autoimmune disease and cancer
AUTHOR: Radosevich T J; Link C J
CORPORATE SOURCE: Des Moines, IA, USA.
PATENT ASSIGNEE: Hum.Gene-Ther.Res.Inst.Des-Moines 1999
PATENT NUMBER: WO 9936562 PATENT DATE: 19990722 WPI ACCESSION NO.:
1999-468988 (1939)
PRIORITY APPLIC. NO.: US 71409 APPLIC. DATE: 19980114
NATIONAL APPLIC. NO.: WO 99US733 APPLIC. DATE: 19990113
LANGUAGE: English
ABSTRACT: A nucleotide expression system for the introduction of a therapeutic gene is claimed along with: a recombinant viral vector comprising a therapeutic gene and a recombinant non-native immune suppression gene; a recipient cell transformed with the vector; and a plasmid retro virus vector comprising an immune suppression gene selected from US11 or ICP47, or an antibiotic-resistance gene. The vectors can be used for the gene therapy of major histocompatibility complex class-I (MHC-I) associated autoimmune disease or cancer. The immunosuppression gene (e.g. from an SIV virus, Epstein-Barr virus, adeno virus or cowpox virus) prevents host rejection of the vector. In an example, vector LISN containing the herpes simplex virus gene LISN, and vector LUSN containing a human cytomegalo virus vector was constructed. These vectors were then expressed in an A375 human melanoma cell culture. A375 cells containing the vectors exhibited significantly reduced levels of MHC-I cell surface expression. (154pp)

11/3,AB/40 (Item 10 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242566 DBA Accession No.: 1999-13331 PATENT
A universal bystander cell line of human origin - vector-mediated granulocyte-macrophage colony stimulating factor and hygromycin-resistance reporter gene transfer for cancer infection therapy and gene therapy
AUTHOR: Levitsky H I; Borrello I
CORPORATE SOURCE: Baltimore, MD, USA.
PATENT ASSIGNEE: Univ.Johns-Hopkins 1999
PATENT NUMBER: WO 9938954 PATENT DATE: 19990805 WPI ACCESSION NO.:
1999-479179 (1940)
PRIORITY APPLIC. NO.: US 73405 APPLIC. DATE: 19980202
NATIONAL APPLIC. NO.: WO 99US2253 APPLIC. DATE: 19990202
LANGUAGE: English
ABSTRACT: A universal bystander cell line (I), which is a human cell line naturally lacking major histocompatibility class-I (MHC-I) and/or class-II (MHC-II) antigens and which is modified by a nucleic acid molecule encoding granulocyte-macrophage colony stimulating factor (GM-CSF), is new. Also claimed are: a composition (A) containing (I) and a cancer antigen; and a method for producing (I) which involves obtaining a human cell line which lacks MHC-I antigens and MHC-II antigens, modifying the cell line by introducing a nucleic acid molecule containing a DNA sequence encoding GM-CSF operably linked to a
promoter and a DNA sequence encoding a selectable marker (hygromycin-resistance) operably linked to a promoter and using the selectable marker to isolate cells which produce at least 500 ng of GM-CSF/10(6) cells.24 hr. The cell line may be useful for stimulating immune responses to a cancer in a human patient. The cell line may also be used to suppress autoimmune diseases, e.g. rheumatoid arthritis and multiple sclerosis. The cells line may be used to enhance an immune response to an infectious disease such as HIV virus, AIDS, graft versus host rejection and malaria. (35pp)

11/3,AB/41 (Item 11 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242524 DBA Accession No.: 1999-13289 PATENT
New human receptor proteins, used e.g. to treat, prevent and diagnose gastrointestinal and developmental disorders - vector-mediated gene transfer and expression in host cell and antibody, agonist and antagonist for cancer and %%%autoimmune%%% disease therapy, %%%gene%%%
%%%therapy%%% and drug screening
AUTHOR: Hillmann J L; Bandman O; Yue H; Guegler K J; Corley N C; Au-Young J; Tang T Y; Shah P; Lal P; Baughn M
CORPORATE SOURCE: Palo Alto, CA, USA.
PATENT ASSIGNEE: Incyte-Pharm. 1999
PATENT NUMBER: WO 9941375 PATENT DATE: 19990819 WPI ACCESSION NO.:
1999-494536 (1941)
PRIORITY APPLIC. NO.: US 22939 APPLIC. DATE: 19980212
NATIONAL APPLIC. NO.: WO 99US2572 APPLIC. DATE: 19990205
LANGUAGE: English
ABSTRACT: Purified polypeptide (A) encoding human receptor proteins, with
one of 8 specified protein sequences, are new. Also claimed are: purified variants (A') of (A) which have at least 90% identity with the protein sequences; isolated and purified nucleic acid (I) encoding (A) and variants with at least 90% identity with (I); polynucleotides that hybridize to (I) under stringent conditions or are complements of (I); expression vectors containing at least a fragment of (I); host cells transformed with the vector; the recombinant production of (A) by culturing the transformed cells; a pharmaceutical composition containing (A) and a support; purified antibodies which are specific for (A); purified agonists and antagonists of (A); and a method for detecting (I) via hybridization, optionally after amplification using polymerase chain reaction. The different peptides and their agonists and antagonists may be useful for the prevention, therapy and gene therapy of gastrointestinal disorders (e.g. peptic esophagitis), developmental disorders (e.g. muscular dystrophy), cancers or autoimmune/inflammatory diseases (e.g. AIDS). The antibodies may be used for diagnosis and drug screening. (93pp)

11/3,AB/42 (Item 12 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242519 DBA Accession No.: 1999-13284 PATENT
Tumor necrosis factor receptor homolog - human recombinant tumor necrosis factor homolog, thought to regulate T-lymphocyte survival, useful for the modulation of autoimmune and inflammatory responses
AUTHOR: Ashkenazi A J; Gurney A L; Marsters S A; Pitti R M; Wood W I;
Goddard A
CORPORATE SOURCE: South San Francisco, CA, USA.
PATENT ASSIGNEE: Genentech 1999
PATENT NUMBER: WO 9940196 PATENT DATE: 19990812 WPI ACCESSION NO.:

1999-494296 (1941)
PRIORITY APPLIC. NO.: US 74087 APPLIC. DATE: 19980209
NATIONAL APPLIC. NO.: WO 99US2642 APPLIC. DATE: 19990209
LANGUAGE: English
ABSTRACT: A tumor necrosis factor homolog (PRO364) (I) and its encoding DNA
sequence (II) (whose cDNA is deposited in ATCC 209436) are new. Also
claimed are: variants and complements of (I) and (II); a (II)-derived DNA probe; vectors and host cells harboring (II); the recombinant production of (I); a chimeric fusion protein comprising (I) and a heterologous protein; and (I)-specific antibody. The homologs are useful for modulating apoptosis, NF-KB activation and inflammatory and autoimmune responses in mammalian cells. (I) may be used to generate antisense sequence and for drug screening for tumor necrosis factor-inhibitors. (I) has homology with tumor necrosis factor cytokine family members including e.g. human Apo-2L, Fas/Apo1-ligand, and lymphotoxin-alpha. In an example, human Jurkat T-lymphocyte leukemia cells were transfected with (I). This was found to inhibit the T-lymphocyte activated-induced cell death response, suggesting that (I) is involved in regulating T-lymphocyte survival. (104pp)

11/3,AB/43 (Item 13 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242474 DBA Accession No.: 1999-13239 PATENT
Interleukin-18 receptor complex useful for treating inflammatory and/or autoimmune diseases attributable to IL-18 signalling - recombinant interleukin-1 receptor, interleukin-1 accessory protein receptor fusion protein, used to inhibit interleukin-18 activity
AUTHOR: Sims J E; Born T L
CORPORATE SOURCE: Seattle, WA, USA.
PATENT ASSIGNEE: Immunex 1999
PATENT NUMBER: WO 9937772 PATENT DATE: 19990729 WPI ACCESSION NO.:
1999-493952 (1941)
PRIORITY APPLIC. NO.: US 94469 APPLIC. DATE: 19980728
NATIONAL APPLIC. NO.: WO 99US1419 APPLIC. DATE: 19990122
LANGUAGE: English
ABSTRACT: Complexes of interleukin-1 receptor related protein-1 (IL-1RRP1)
and interleukin-1 accessory protein receptor (AcPL-R) are claimed. The IL-1RRP1 is encoded by a DNA sequence with a given 1,626 or 2,830 bp
DNA sequence, a sequence that hybridizes with one of those sequences, or a DNA that encodes a 541 or 537 amino acid protein sequence. The AcPL-R is encoded by a given 2,681 or 2,841 bp DNA sequence, a sequence
that hybridizes with one of those sequences, or a DNA that encodes a 599 or 614 amino acid protein sequence. Also claimed is receptor (I) of given formula, DNA encoding (I), a vector containing that DNA and a means of producing (I) by culturing a host cell transformed by that vector. The claims also cover a receptor made up of a fusion protein containing an antibody light chain protein and the C-terminus of a soluble IL-1RRP1 or AcPL and a fusion protein containing an antibody heavy chain protein attached to the C-terminus of AcPl or IL-1RRP1. Also covered is a means of preparing that receptor, a composition containing the given receptors and a means of inhibiting interleukin-18, in inflammatory or autoimmune disease therapy. (56pp)

11/3,AB/44 (Item 14 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242462 DBA Accession No.: 1999-13227 PATENT
CBCAAC01, an RNA polymerase I subunit homologue, and related polypeptides
- recombinant CBCAAC01 protein, nucleic acid, antibody, agonist, antagonist, DNA probe and DNA primer used in e.g. cancer, autoimmune disease, diabetes mellitus diagnosis and therapy
AUTHOR: Huang Q; Zhong X; Wang Y
CORPORATE SOURCE: Shanghai, People's Republic of China.
PATENT ASSIGNEE: Univ.Shanghai-Second-Med. 1999
PATENT NUMBER: WO 9936435 PATENT DATE: 19990722 WPI ACCESSION NO.:
1999-493871 (1941)
PRIORITY APPLIC. NO.: WO 98CN00007 APPLIC. DATE: 19980119
NATIONAL APPLIC. NO.: WO 98CN7 APPLIC. DATE: 19980119
LANGUAGE: English
ABSTRACT: A nucleic acid (I) with a sequence at least 85% identical to a nucleic acid that encodes a given 342 amino acid protein sequence of CBCAAC01, is claimed. Also claimed is a DNA or RNA expression system
that can be used to express CBCAAC01 in a host cell, a means of producing a host cell that expresses CBCAAC01 using that expression system, a host cell produced by that method, and a means of producing CBCAAC01 by culturing that transformed cell. The claims also cover a CBCAAC01 with a protein sequence at least 80% identical to the given protein sequence, an antibody specific to that protein, a means of identifying agonists and antagonists of the protein, and agonists and antagonists identified by that technique. CBCAAC01 is an RNA-polymerase
subunit hRPA39 related protein. The products can be used to produce CBCAAC01, in research, screening and diagnostic assays, to inhibit or enhance CBCAAC01 activity, and as vaccines, in cancer, leukemia, autoimmune disease, diabetes mellitus and spontaneous abortion therapy. Also disclosed are DNA probes and DNA primers. (I) has a given 1,103 bp DNA sequence.

11/3,AB/45 (Item 15 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242044 DBA Accession No.: 1999-12145
Inhibition of xenoreactive natural antibody production by retroviral gene therapy - retro virus-mediated expression of N-acetyllactosaminide-alpha-1,3-galactosyltransferase in mouse, useful for inducing tolerance, preventing xenotransplantation rejection, etc.
AUTHOR: Bracy J L; Sachs D H; +Iacomini J
CORPORATE AFFILIATE: Univ.Allegheny-Health-Sci. Gen.Hosp.Boston Harvard-Med.Sch.
CORPORATE SOURCE: Transplantation Biology Research Center, Massachusetts
General Hospital and Harvard Medical School, Building 149-5210, 13th Street, Boston, MA 02129, USA.
JOURNAL: Science (281, 5384, 1845-47) 1998
ISSN: 0036-8075 CODEN: SCIEAS
LANGUAGE: English
ABSTRACT: A functional pig N-acetyllactosaminide-alpha-1,3-galactosyltransf
erase (I) (EC-2.4.1.151) was transfected into bone marrow cells using a retro virus vector (LGTRV) in an attempt to inhibit the production of xenoreactive natural antibodies (XNA) which mediate the rejection of xenotransplants by binding the carbohydrate epitope Gal-alpha-1,3-Gal-beta-1-4GlcNAc-R (produced by (I)) on donor tissues. The transfection caused the production of XNAs to cease in the mouse (I)-knockout animal model. It was concluded that gene transfer into bone marrow may overcome the humoral rejection of discordant xenografts and may also be useful for the induction of B-lymphocyte tolerance. Similar approaches may also be useful for inducing tolerance in other disorders including autoimmune disease. (34 ref)

11/3,AB/46 (Item 16 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0242024 DBA Accession No.: 1999-12125
Systemic delivery of interleukin 10 by intramuscular injection of expression plasmid DNA prevents autoimmune diabetes in non-obese mice - intramuscular injection of plasmid pCAGGS encoding interleukin-10 used in %%%autoimmune%%% diabetes %%%gene%%% %%%therapy%%%
AUTHOR: Nitta Y; Tashiro F; Tokui M; Shimada A; Takei I; Tabayashi K;
+Miyazaki J
CORPORATE AFFILIATE: Univ.Osaka Univ.Tohoku Univ.Keio
CORPORATE SOURCE: Department of Nutrition and Physiological Chemistry,
Osaka University Medical School, 2-2 Yamadaoka, Suita, Osaka 565-0871,
Japan.
JOURNAL: Hum.Gene Ther. (9, 12, 1701-07) 1998

ISSN: 1043-0342 CODEN: HGTHE3
LANGUAGE: English
ABSTRACT: Intramuscular injection of plasmids has been shown to induce
long-term systemic expression of cytokines. This technique was used to deliver plasmid DNA encoding interleukin-10 (IL-10), used in immunosuppression and prevention of autoimmune diabetes progression, to non-obese diabetic mice. Plasmid pCAGGS-IL10 was injected into mice muscle at 3 and 5 wk. old. The plasmid contained the 537 bp IL-10 encoding region, linked to the CAG promoter and a 3F flanking sequence derived from the rabbit beta-globin gene. The cytokine protein was detected in the serum for at least 2 wk. after injection, using ELISA. Injection of the plasmid was unable to reduce the severity of insulitis at 13 wk. of age, but reduced the incidence of diabetes significantly. The results indicated the intramuscular injection of plasmid DNA can be used to suppress autoimmune disease progression. This system show potential in human %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%.
(34 ref)

11/3,AB/47 (Item 17 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0241942 DBA Accession No.: 1999-12043 PATENT
New interleukin-1 receptor antagonist-beta, useful for treating inflammation an autoimmune diseases - expression in host cell, antibody, antagonist, agonist, antisense oligonucleotide, DNA probe and DNA primer used for disease diagnosis, gene therapy and recombinant vaccine
AUTHOR: Marshall L; Young P R
CORPORATE SOURCE: Philadelphia, PA, USA.
PATENT ASSIGNEE: SK-Beecham 1999
PATENT NUMBER: WO 9936541 PATENT DATE: 19990722 WPI ACCESSION NO.:
1999-430615 (1936)
PRIORITY APPLIC. NO.: US 69619 APPLIC. DATE: 19980429
NATIONAL APPLIC. NO.: WO 99US847 APPLIC. DATE: 19990114
LANGUAGE: English
ABSTRACT: Proteins (169 amino acids) and polynucleotides (1,183 bp) of
interleukin-1 receptor antagonist-beta (IL-1RA-beta) are new. Also claimed are: a DNA or RNA molecule containing an expression system capable of producing IL-1RA-beta; a host cell; a process for producing IL-1RA-beta; a process for producing a cell which produces IL-1RA-beta; an antibody; methods for the treatment of an individual in need of enhanced or inhibited IL-1RA-beta protein activity; a process for diagnosing a disease or susceptibility of a disease in a subject related to expresssion or activity of IL-1RA-beta; a method for identifying compounds which inhibit or agonize IL-1RA-beta; and agonist; an antagonist; and a DNA probe or DNA primer. The protein and polynucleotide can be used to treat or diagnose diseases associated with IL-1RA-beta expression. The nucleic acid can be used as an antisense oligonucleotide and the protein can be used to immunize and prevent disease either by direct administration using a gene therapy vector or as a vaccine. (34pp)

11/3,AB/48 (Item 18 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0241938 DBA Accession No.: 1999-12039 PATENT
New isolated nucleic acid molecule encoding a rev-caspase - vector-mediated p34 tumor suppressor gene transfer and expression in MCF-7 cell culture for cancer and %%%autoimmune%%% disease therapy and %%%gene%%%
%%%therapy%%%
AUTHOR: Alnemri E S
CORPORATE SOURCE: Philadelphia, PA, USA.
PATENT ASSIGNEE: Univ.Philadelphia-Thomas-Jefferson 1999
PATENT NUMBER: WO 9935277 PATENT DATE: 19990715 WPI ACCESSION NO.:
1999-419353 (1935)
PRIORITY APPLIC. NO.: US 70987 APPLIC. DATE: 19980109
NATIONAL APPLIC. NO.: WO 99US632 APPLIC. DATE: 19990111
LANGUAGE: English
ABSTRACT: An isolated nucleic acid molecule (I) which encodes a human
rev-caspase, is new. Also claimed are: an expression vector containing (I) operably linked to a promoter; a host cell transfected with the vector; a rev-caspase protein; the identification of an inhibitor or enhancer of caspase processing activity or caspase-mediated apoptosis; and a gene delivery vehicle containing (I) operably linked to a promoter. The gene delivery vehicle may be useful for cancer therapy, where the gene delivery vehicle is internalized by tumor cells. The gene delivery vehicle may also be used for the treatment of autoimmune diseases. Cells transfected with a rev-caspase expression vector may be used to identify modulators of caspase-mediated apoptosis. Caspase inhibitors may be useful for treating neurodegenerative diseases as well as for inhibiting apoptosis in the heart following myocardial infarction. In an example, a p34 molecule was expressed in MCF-7 cells for the potent inducement of apoptosis. (74pp)

11/3,AB/49 (Item 19 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0241880 DBA Accession No.: 1999-11981 PATENT
Novel B-cell myelin oligodendrocyte glycoproteins - nucleic acid, and monoclonal antibody used in immunosuppression and gene therapy
AUTHOR: Browning J
CORPORATE SOURCE: Cambridge, MA, USA.
PATENT ASSIGNEE: Biogen 1999
PATENT NUMBER: WO 9923867 PATENT DATE: 19990520 WPI ACCESSION NO.:
1999-418423 (1935)
PRIORITY APPLIC. NO.: US 64761 APPLIC. DATE: 19971107
NATIONAL APPLIC. NO.: WO 98US23826 APPLIC. DATE: 19981105
LANGUAGE: English
ABSTRACT: A nucleic acid encoding B-lymphocyte myelin oligodendrocyte
glycoproteins (BMOG) is claimed. The nucleic acid has a given 672, 890 or 835 bp DNA sequence encoding a 190, 177 or 201 amino acid protein sequence. Also claimed are vectors containing those DNA sequences, a protein with the given protein sequences, and a host cell transformed by the vectors. The claims also cover an IgG fusion protein containing at least part of a BMOG, an antibody, particularly a monoclonal antibody, specific to BMOG, and a hybridoma cell line used to produce that antibody. Also covered is the recombinant production of a BMOG. BMOG is used to modulate a subjectFs immune response, or to inhibit signal transduction in a cell expressing BMOG. It can also be used to target a toxin, imaging agent or radionuclide to a BMOG expressing cell, and is particularly of use in regulation of autoimmune and inflammatory disease. The nucleic acid encoding BMOG can also be used in gene therapy. The BMOG is preferably produced as part of a soluble fusion protein. (43pp)

11/3,AB/50 (Item 20 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0241319 DBA Accession No.: 1999-11420 PATENT
Peptide derived from apolipoprotein-E is useful in the treatment and prevention of inflammatory disease - human and mouse apolipoprotein-E peptide is useful for inducing stem cell differentiation into dendritic cells, and to inhibit inflammation and autoimmune disease
AUTHOR: Singh B; Rider B
CORPORATE SOURCE: London, Ontario, Canada.
PATENT ASSIGNEE: Univ.Western-Ontario 1999
PATENT NUMBER: WO 9931227 PATENT DATE: 19990624 WPI ACCESSION NO.:
1999-405031 (1934)
PRIORITY APPLIC. NO.: US 69531 APPLIC. DATE: 19971212
NATIONAL APPLIC. NO.: WO 98CA1129 APPLIC. DATE: 19981211
LANGUAGE: English
ABSTRACT: A peptide derived from human and mouse apolipoprotein-E,
designated apoE1.B (I) is new. Also claimed are; a method of modulating the immune system or for treating cancer by administering an effective amount of (I) or its encoding DNA sequence (II) (in a suitable diluent or carrier) to a cell or animal; and a method for inducing tolerogenic dendritic cells by administering an effective amount of (I) or (II).

(I) may be used e.g. to activate monocytes to differentiate into tolerogenic dendritic cells for the treatment of autoimmune disease and transplantation, to inhibit atherosclerotic plaque formation, to treat arthritis, inflammatory bowel disease, Sjogren syndrome, restenosis, asthma, spinal cord trauma, etc. In an example, the role of (I) in inflammation, particularly in response to arterial injury was investigated. A balloon angioplasty injury rat model was used. 300 ug/ml (I) Was infused intra-arterially prior to angioplasty at the site of injury. Measurement of arterial thickness and lumen size showed that 500 ug/ml (I) either reduced lesion size or prevented their formation altogether. No adverse effects were observed in (I) treated rats. (60pp)

11/3,AB/51 (Item 21 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0240911 DBA Accession No.: 99-10485
Tamplicon-7, a novel T-lymphotropic vector derived from human herpesvirus 7
- T-lymphocyte replication-defective herpes virus vector packaged using a helper virus, and used in T-lymphocyte disease gene therapy
AUTHOR: Romi H; Singer O; Rapaport D; +Frenkel N
CORPORATE AFFILIATE: Univ.Tel-Aviv
CORPORATE SOURCE: Laboratory for Molecular Virology, Department of Cell
Research and Immunology, Tel Aviv University, Tel Aviv 69978, Israel. email:nfrenkel@post.tau.ac.il
JOURNAL: J.Virol. (73, 8, 7001-07) 1999
ISSN: 0022-538X CODEN: JOVIAM
LANGUAGE: English
ABSTRACT: A novel T-lymphocyte-defective virus vector was derived from
human herpes virus-7 (HHV-7). The vector, designated Tamplicon-7 is able to replicate in CD4+ T-lymphocytes. The system incorporates a helper virus, and defective virus genomes obtained by replicating the Tamplicon vector. Two cis-acting functions were needed for the replication and packaging of the defective virus genomes in the presence of the helper virus. Specifically they were the virus DNA replication origin and the composite cleavage and packaging signal, which directs cleavage and packaging of defective virus genomes. Virus DNA replication was shown to be compatible with the rolling circle model, and produced head-to-tail concatamers of the Tamplicon vector. As a result, the replicated viruses are packaged by the helper virus, and secreted into the medium. It was also shown that the vector can be used to express a foreign gene, in T-lymphocytes infected with HHV-7 helper virus. Tamplicon-7 may have applications in gene therapy of diseases that affect CD4+ T-lymphocytes, such as autoimmune disease, T-lymphocyte lymphomas and AIDS. (37 ref)

11/3,AB/52 (Item 22 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0240427 DBA Accession No.: 1999-11032 PATENT
Autologous antigen presenting cells - virus-mediated auto-antigen gene transfer expression used for %%%autoimmune%%% disease %%%gene%%%
%%%therapy%%%
AUTHOR: Drachman D B
CORPORATE SOURCE: Baltimore, MD, USA.
PATENT ASSIGNEE: Univ.Johns-Hopkins 1999
PATENT NUMBER: WO 9929883 PATENT DATE: 19990617 WPI
ACCESSION NO.:
1999-385618 (1932)
PRIORITY APPLIC. NO.: US 67547 APPLIC. DATE: 19971203
NATIONAL APPLIC. NO.: WO 98US25575 APPLIC. DATE: 19981203
LANGUAGE: English
ABSTRACT: A method of activating auto-antigen-specific T-lymphocytes in an
autoimmune disease patient is new and involves removing antigen presenting cells (ATCs) from the patient; transferring into the AOCs a gene which encodes all or a portion of an auto-antigen to which the patients antigen-specific T-lymphocytes respond; and reintroducing the APCs into the patient. Also claimed are: APCs of an autoimmune disease patient which are transduced or transferred to express a first segment of DNA encoding all or a portion of an auto-antigen to which the patients antigen-specific T-lymphocytes respond, where the cells compromise a second segment of DNA encoding a signal peptide 5' to the first segment and a third segment encoding a transmembrane and cytoplasmic tail 3' to the first segment, where all or a portion of the auto-antigen is processed by endosomes; and a virus which infects human APCs. Antigen-specific T-lymphocyte provides a system in which drugs and treatments can be screened. Activated T-lymphocytes can be ablated, which is useful for antigen-specific immunotherapy for the treatment of autoimmune disease, especially myasthenia gravis. (32pp)

11/3,AB/53 (Item 23 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0240257 DBA Accession No.: 1999-10862 PATENT
Apoptosis induction by interference with Bip-like protein - used in autoimmune disease diagnosis, therapy and gene therapy
AUTHOR: Noteborn M; Danen-van Oorschot A A A M
CORPORATE SOURCE: Leiden, The Netherlands.
PATENT ASSIGNEE: Leadd 1999
PATENT NUMBER: WO 9928461 PATENT DATE: 19990610 WPI
ACCESSION NO.:
1999-385381 (1932)
PRIORITY APPLIC. NO.: EP 97203783 APPLIC. DATE: 19971203
NATIONAL APPLIC. NO.: WO 98NL688 APPLIC. DATE: 19981203
LANGUAGE: English
ABSTRACT: A recombinant nucleic acid that encodes a functional fragment of
a member of the Bip-GRP78-like proteins, that includes at least part of one of the five given DNA sequences, is claimed. Alternatively the nucleic acid may contain a sequence at least 70-90% identical to the given sequences. Also claimed is an expression vector containing the nucleic acid, and an expression vector encoding an apoptin-like protein. The claims also cover a recombinant or isolated proteinaceous substance with a Bip-GRP78-like activity and containing at least part of the given protein sequence, or a functional equivalent thereof. Also covered is a means of identifying apoptotic agents, apoptotic agents obtained by that procedure, and a means of inducing apoptosis in a cell by inhibition of Bip-GRP78 activity. The claims extend to a means of inducing apoptosis in a cell using an apoptotin-like activity, and a means of inducing those activities using nucleic acid molecules. (40pp)

11/3,AB/54 (Item 24 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0239780 DBA Accession No.: 1999-09881 PATENT
Oncogene- or virus-related system for expressing effector gene, used to treat or prevent e.g. cancer, virus infections and autoimmune disease
- plasmid pXP2-mediated expression in Rb-negative osteosarcoma cell
AUTHOR: Mueller R; Sedlacek H H
CORPORATE SOURCE: Frankfurt am Main, Germany.
PATENT ASSIGNEE: Hoechst-Roussel 1999
PATENT NUMBER: EP 922768 PATENT DATE: 19990616 WPI
ACCESSION NO.:
1999-329399 (1928)
PRIORITY APPLIC. NO.: DE 1051587 APPLIC. DATE: 19971121
NATIONAL APPLIC. NO.: EP 98121471 APPLIC. DATE: 19981111
LANGUAGE: German
ABSTRACT: A nucleic acid construct containing a promoter for expressing an
effector gene and a promoter for regulating expression of transcription factor where the protein binds the promoter of the effector gene to control expression, is new. The activity of the protein depends on cellular regulatory proteins which specifically bind to and modify its activity. Also claimed are a vector (e.g. plasmid pXP2) and isolated cells containing the vector (e.g. Rb-negative osteosarcoma cells). The construct can be used for the treatment and prevention of infections, tumors, leukemia, autoimmune disease, allergy, arthritis, inflammation, organ rejection, guest versus host disease, blood coagulation or circulatory disorders, anemia, hormonal disorders and central nervous system injury. (44pp)

11/3,AB/55 (Item 25 from file: 357)

DIALOG(R)File 357:Derwent Biotechnology Abs
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0239670 DBA Accession No.: 1999-09771 PATENT
New Nmi/Hou-like and IFP-35-like proteins useful for diagnosing and treating cancer and autoimmune diseases - vector-mediated delivery used for gene therapy and apoptosis induction
AUTHOR: Noteborn M H M; Danen-van Oorschot A A A M
CORPORATE SOURCE: Leiden, The Netherlands.
PATENT ASSIGNEE: Leadd 1999
PATENT NUMBER: EP 921192 PATENT DATE: 19990609 WPI ACCESSION NO.:
1999-329088 (1928)
PRIORITY APPLIC. NO.: EP 97203781 APPLIC. DATE: 19971203
NATIONAL APPLIC. NO.: EP 97203781 APPLIC. DATE: 19971203
LANGUAGE: English
ABSTRACT: A Nmi/Hou-like protein which is at least 60% homologous to either
a defined sequence of 294 amino acids or a protein encoded by a defined 658 or 729 bp sequence and an IFP35-like protein which is at least 60% homologous to either a defined sequence of 239 amino acids or a protein encoded by defined sequences of 659, 568 or 631 bp, are new. Also claimed are: recombinant nucleic acid molecules encoding the proteins; a gene transfer vehicle or expression vector; and the use of apoptin to find proteins associated with apoptosis. The proteins may be used to diagnose cancer-prone cells and induce apoptosis in a population of cancer-prone or cancerous cells within a patient which contain apoptin-like activity. Apoptosis is induced by interfering with the Nmi/Hou-like or IFP-like proteins or both. They may also be used to induce apoptosis in patients suffering from autoimmune diseases. The nucleic acids can be used to direct expression of the proteins to induce apoptosis in a population of transformed or cancerous cells containing apoptin-like activity, i.e. gene therapy. (42pp)

11/3,AB/56 (Item 26 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0238710 DBA Accession No.: 99-08811 PATENT
New compositions for targeted delivery of nucleic acid to cells - adeno virus vector-mediated cytotoxin gene transfer and expression in MO7s, NK and stem cell and T-lymphocyte used for tumor, virus and bacterial infection and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Spence S E; Keller J R; Smith J S
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: U.S.Dep.Health-Hum.Serv. 1999
PATENT NUMBER: WO 9919500 PATENT DATE: 990422 WPI ACCESSION NO.:
99-277649 (9923)
PRIORITY APPLIC. NO.: US 61587 APPLIC. DATE: 971010
NATIONAL APPLIC. NO.: WO 98US21364 APPLIC. DATE: 981009
LANGUAGE: English
ABSTRACT: A method for targeting delivery of nucleic acid to cells is new and involves using a biotinylated recombinant encapsidated virus, particularly adeno virus, linked via streptavidin to a biotinylated targeting moiety, is new. The targeting moiety is a ligand, a steel factor or an antibody, preferably directed against cell surface markers for steel factor, especially anti-CD34, anti-CD44, or anti-CD117 antibody. The compositions can be used for the transfer of nucleic acid e.g. encoding a cytotoxin, into targeted cells, particularly for gene therapy, e.g. for the treatment of tumors, virus and bacterial infections and autoimmune diseases. In an example, a recombinant human serotype-5 adeno virus containing firefly (Photinus pyralis) luciferase (EC-1.13.12.7), a cytomegalo virus promoter and an SV40 virus polyA addition sequence (AdCMV-Luc) was cultivated in 293 cell. Biotin was covalently linked to intact adeno virus particles. The product was then reacted with biotinylated-steel factor and used to transfect MO7s cells, NK cells, T-lymphocytes and stem cells.

11/3,AB/57 (Item 27 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0238572 DBA Accession No.: 99-08673 PATENT
Synthetic genes encoding immunoreactive peptides containing cysteine or methionine - retro virus vector encoding immunosuppressive peptide for autoimmune disease therapy
AUTHOR: Bergstrand H; Eriksson T; Lindvall M; Sarnstrand B
CORPORATE SOURCE: Sodertalje, Sweden.
PATENT ASSIGNEE: Astra 1999
PATENT NUMBER: WO 9919347 PATENT DATE: 990422 WPI ACCESSION NO.:
99-287953 (9924)
PRIORITY APPLIC. NO.: US 949024 APPLIC. DATE: 971010
NATIONAL APPLIC. NO.: WO 98SE1801 APPLIC. DATE: 981006
LANGUAGE: English
ABSTRACT: Nucleic acid (NA) molecules comprise a coding sequence encoding
an immunoreactive peptide chosen from 5 disclosed formulae and further encodes a protein targeting sequence. Also claimed are: a mammal expression vector containing the NA; a virus particle capable of infecting a mammal cell, containing the vector; a mammal cell containing the NA operably linked to an expression control sequence; and production of an immunoactive peptide. The NA may be administered to the patient so that its expression product, an immunoactive peptide, modulates an immune response in a patient. The NA can also be used to treat cancer, either after surgery to remove a part of the cancer or after ionizing radiation. A cytokine is also administered in conjunction with the NA. Cells containing the NA molecule can also be used for therapy. The immunoactive peptide is an immunosuppressive and can be used in patients with autoimmune disease. In an example, SPMW1 mamma carcinoma cells in culture were infected with retro virus vector containing the NA encoding immunoactive peptide A and the cells injected into the hind limbs of rats. (104pp)

11/3,AB/58 (Item 28 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0238116 DBA Accession No.: 99-08217
Augmentation of natural immunity to a pro-inflammatory cytokine (TNF-alpha)
by targeted DNA vaccine confers long-lasting resistance to experimental autoimmune encephalomyelitis - nucleic acid vaccine expressing tumor necrosis factor used to increase antibody titer in %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Wildbaum G; +Karin N
CORPORATE AFFILIATE: Rappaport-Fam.Inst.Res.Med.Sci.
CORPORATE SOURCE: Department of Immunology, Rappaport Family Institute for
Research in the Medical Sciences, Bruce Rappaport Faculty of Medicine, Technion, POB 9697, Haifa 31096, Israel.
JOURNAL: Gene Ther. (6, 6, 1128-38) 1999
ISSN: 0969-7128 CODEN: GETHEC
LANGUAGE: English
ABSTRACT: Tumor necrosis factor (TNF) is believed to be a vital pro-inflammatory cytokine in T-lymphocyte-mediated autoimmune diseases,
especially rheumatoid arthritis and multiple sclerosis (MS). Experimental autoimmune encephalomyelitis (EAE) is a suitable animal model of MS, and was used to evaluate the levels of a TNF-specific antibody during EAE development, which didn't reach sufficient titers to prevent disease development. When a TNF-naked DNA vaccine was
administered, the antibody titer increased, resulting in resistance to EAE. The antibodies retained their neutralizing activity in vitro, and inhibited disease development when inserted into other EAE rats. This indicated a TNF nucleic acid vaccine can be used to inhibit EAE by enhancing the natural immunity to the pro-inflammatory cytokine. This provides a tool to encourage the immune system to elicit an anti-self protective immunity to inhibit the autoimmune response. (97 ref)

11/3,AB/59 (Item 29 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0237488 DBA Accession No.: 99-07589 PATENT
Protease-resistant Fas ligand derivatives used for prevention of e.g. cancer - vector-mediated protease-resistant Fas ligand derivative gene transfer and expression in host cell, also used for cancer, virus infection or %%%autoimmune%%% disease therapy or %%%gene%%%

%%%therapy%%%
AUTHOR: Nagata S; Tanaka M
CORPORATE SOURCE: Tokyo, Japan; Osaka, Japan.
PATENT ASSIGNEE: Mochida-Pharm.; Osaka-Biosci.Inst. 1999
PATENT NUMBER: WO 9914325 PATENT DATE: 990325 WPI
ACCESSION NO.:
99-229531 (9919)
PRIORITY APPLIC. NO.: JP 97252541 APPLIC. DATE: 970917
NATIONAL APPLIC. NO.: WO 98JP4187 APPLIC. DATE: 980917
LANGUAGE: JA
ABSTRACT: A new protease-resistant Fas ligand derivative has a deletion in
the region of the human Fas ligand that is susceptible to protease attack. Derivatives of human Fas ligand (and DNA encoding them) in which specified amino acids have been deleted or substituted by other amino acids, and in which another specified region has been substituted or deleted. Also claimed are apoptosis-modulators containing a soluble Fas ligand. The new derivatives may be used for the prevention and treatment of diseases such as cancer, virus infection and autoimmune disease, e.g. by introduction of DNA encoding the modified Fas ligand into effector cells using a suitable gene therapy vector. (60pp)

11/3,AB/60 (Item 30 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0237392 DBA Accession No.: 99-07493 PATENT
New humanized antibodies to human gp30 - humanized antibody preparation by
vector expression in host cell, used for cancer or %%%autoimmune%%% disease therapy, %%%gene%%% %%%therapy%%% or as immunosuppressive, etc.
AUTHOR: Black A; Hanna N; Padlan E A; Newman R A
CORPORATE SOURCE: San Diego, CA, USA.
PATENT ASSIGNEE: Idec-Pharm. 1999
PATENT NUMBER: WO 9912566 PATENT DATE: 990318 WPI
ACCESSION NO.:
99-229142 (9919)
PRIORITY APPLIC. NO.: US 925339 APPLIC. DATE: 970908
NATIONAL APPLIC. NO.: WO 98US18163 APPLIC. DATE: 980908
LANGUAGE: English
ABSTRACT: A new humanized antibody is capable of competing with a mouse
24-31 antibody for inhibiting CD40 binding to gp39. Also claimed are: a humanized antibody derived from mouse monoclonal antibody 24-31 which
retains at least one third the gp39 antigen binding affinity of the original antibody, and which retains the half-maximal potency in in vivo functional activity in a B-lymphocyte assay at a concentration of not more than 3-fold the concentration of the parent antibody; a DNA sequence encoding the antibody; a vector containing the DNA; and a method of suppressing humoral and/or cellular immune responses against ells or vectors administered during cell or gene therapy further comprising administering a humanized antibody to suppress the immune responses against the cell or vector used for therapy. The antibody may be used for therapy of autoimmune diseases, graft-versus-host disease or graft rejection, or as immunosuppressives during gene therapy using retro virus or adeno virus vectors. This should aid in gene therapy of cancers and autoimmune diseases. (121pp)

11/3,AB/61 (Item 31 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0236745 DBA Accession No.: 99-06846
Prevention of %%%autoimmune%%% diabetes by intramuscular %%%gene%%%
%%%therapy%%% with a nonviral vector encoding an interferon-gamma receptor/IgG1 fusion protein - vector plasmid IFNgammaR/IgG1 construction
AUTHOR: Prud'homme G J; Chang Y
CORPORATE AFFILIATE: Univ.McGill
CORPORATE SOURCE: Department of Pathology, McGill University, 3775 University Street, Room B13, Montreal, Quebec, H3A 2B4 Canada.
JOURNAL: Gene Ther. (6, 5, 771-77) 1999
ISSN: 0969-7128 CODEN: GETHEC
LANGUAGE: English
ABSTRACT: Vector plasmid IFNgammaR/IgG1 was constructed by generating cDNA
encoding a fusion protein of interferon-gamma receptor and a heavy chain IgG1 by polymerase chain reaction. The resulting DNA was inserted between the EcoRV and EcoRI sites of VR-1255. The main features of the
vector were cytomegalo virus immediate early/enhancer promoter, a cytomegalo virus intron-A, a minimal rabbit beta-globin polyadenylation and transcriptional termination sequences, and a kanamycin-resistance selectable marker gene. Intramuscular injections of the vector as naked DNA in mice resulted in secretion of IFN-gammaR/IgG1, with serum levels
over 100 ng/ml for months after treatment. The levels were sufficient to neutralize IFN-gamma in vivo and prevent multiple low-dose streptozotocin-induced diabetes or cyclophosphamide-accelerated diabetes in NOD mice, both characterized by systemic release of IFN-gamma. In these diseases gene therapy reduces inflammation in the islets of Langerhans. The circulating fusion protein blocked IFN-gamma-enhanced nitric oxide production by peritoneal macrophages. The vector is suited to long term therapy since it is non immunogenic. (38 ref)

11/3,AB/62 (Item 32 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0236618 DBA Accession No.: 99-06719 PATENT
A novel T-cell transmembrane protein (TIRC7) - recombinant protein, encoding DNA, antibody, vector and transformed cell for use in disease diagnosis and therapy
AUTHOR: Utku N
CORPORATE SOURCE: Boston, MA, USA.
PATENT ASSIGNEE: Brigham+Women's-Hosp.Boston 1999
PATENT NUMBER: WO 9911782 PATENT DATE: 990311 WPI
ACCESSION NO.:
99-205186 (9917)
PRIORITY APPLIC. NO.: DE 1002653 APPLIC. DATE: 980212
NATIONAL APPLIC. NO.: WO 98EP5462 APPLIC. DATE: 980828
LANGUAGE: English
ABSTRACT: A T-lymphocyte response cDNA-7 (TIRC7) polynucleotide (PN)
encoding a TIRC7 membrane protein or fragment is claimed. The TIRC7 PN
comprises a DNA sequence from: disclosed 2,488 bp sequences; sequences
complementary to and at least 70% identical to the disclosed PNs; and PNs encoding the disclosed 1-614 and 1-601 amino acids of the disclosed protein sequences. Also claimed are: a nucleic acid of at least 15 nucleotides hybridizable to TIRC7; a vector containing the TIRC7 PN; a host cell containing the TIRC7 PN or vector; a TIRC7 membrane protein/fragment encoded by the TIRC7 PN; preparation of the TIRC7 protein; a TIRC7 antibody; a normal cell modified to express TIRC7 protein or antibody; a pharmaceutical composition containing a TIRC7 peptide or protein; an in vitro method for inducing or maintaining unresponsiveness of a T-lymphocyte to an antigen; restoring responsiveness to an antigen by a T-lymphocyte which is unresponsive to the antigen involving contacting the T-cell with an agent that stimulates the T-cell through a TIRC7 membrane protein. The vector, cell, DNA, protein and antibody are used in diagnosis and therapy of autoimmune disease, infection, tumor and allergy.

11/3,AB/63 (Item 33 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0234721 DBA Accession No.: 99-04822 PATENT
Eliciting an immune response using a recombinant adeno-associated virus vector - encoding antigen, useful to stimulate immune response, for shifting cytokine profile of a response and for the therapy or prevention of autoimmune disease or allergy
AUTHOR: Kurtzman G J; Engleman E G; Podsakoff G M; Brockstedt D G
CORPORATE SOURCE: Alameda, CA, USA.
PATENT ASSIGNEE: Avigen 1999
PATENT NUMBER: WO 9904632 PATENT DATE: 990204 WPI
ACCESSION NO.:

99-142465 (9912)
PRIORITY APPLIC. NO.: US 53773 APPLIC. DATE: 970725
NATIONAL APPLIC. NO.: WO 98US15461 APPLIC. DATE: 980724
LANGUAGE: English
ABSTRACT: Eliciting an immune response in a subject using a recombinant
adeno-associated virus vector (AAV) containing a DNA sequence encoding
an antigen operably linked to control sequences is claimed. The vector is useful for shifting the cytokine profile of an immune response from a TH1-lymphocyte-like response to a TH2-lymphocyte-like response. The vector is also useful for modulating allergic reactions, where the vector contains a DNA sequence encoding an immunogenic molecule comprising a first portion derived from an IgE molecule and a second portion derived from an immunogenic carrier molecule (claimed). By transfecting a target cell population with the AAV, a suitable cytotoxic T-lymphocyte response may be elicited, enabling the prevention of disease. The vector is also useful for the therapy or prevention of autoimmune disease, where the antigen may facilitate a reduction in a cytotoxic immune response or a desensitizing immune response against the antigen. In an example, the construction of an AAV Ova vector was detailed. (78pp)

11/3,AB/64 (Item 34 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0234566 DBA Accession No.: 99-04667 PATENT
New nucleic acids encoding secreted human proteins - Uni-ZapXR-mediated expression in host cell and antibody used for autoimmune, inflammation, cancer therapy and gene therapy, etc.
AUTHOR: Ruben S M; Rosen C A; Young P E; Greene J M; Ni J; Feng P;
Florence K A; Hu J S; Ferrie A M; Yu G L; Duan R; Fouad J
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: Hum.Genome-Sci. 1999
PATENT NUMBER: WO 9903990 PATENT DATE: 990128 WPI
ACCESSION NO.:
99-132234 (9911)
PRIORITY APPLIC. NO.: US 56361 APPLIC. DATE: 970818
NATIONAL APPLIC. NO.: WO 98US14613 APPLIC. DATE: 980715
LANGUAGE: English
ABSTRACT: A nucleic acid encoding human secretory proteins is new and at
least 95% identical with: a fragment of sequences (X) or a fragment of cDNA in ATCC 209138, 209139 or 209141 (Z) hybridizable to X; a polynucleotide encoding a fragment, domain, epitope or protein of sequences (Y) or encoded by cDNA of Z; a polynucleotide which hybridizes under standard conditions with any of the above. Also claimed are vectors (e.g. Uni-ZapXR), host cells and antibodies. The protein can be used to identify binding agents, to generate antibodies and therapeutically to alter protein levels. The nucleic acid can be used as antisense and triple helix-forming therapeutics, in gene therapy, for forensic identification, to identify related sequences or specific mRNA and to raise anti-DNA antibodies. The proteins and nucleic acids can be used to treat autoimmune or hematological diseases, allergy, inflammation, cancer or other forms of cell proliferation, viral or other infections. They can also be used in wound healing, to modulate embryonic stem cell differentiation, to modulate weight, appetite, behavior etc. and as a food-additive or preservative. (251pp)

11/3,AB/65 (Item 35 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0234538 DBA Accession No.: 99-04639 PATENT
Dibasic amino acid processing endoprotease - protease gene expression in yeast for use in drug screening
AUTHOR: Franzusoff A; Miranda L R; Wolf J R
CORPORATE SOURCE: Boulder, CO, USA.
PATENT ASSIGNEE: Univ.Technol.Corp. 1999
PATENT NUMBER: US 5866351 PATENT DATE: 990202 WPI
ACCESSION NO.:
99-141921 (9912)
PRIORITY APPLIC. NO.: US 525940 APPLIC. DATE: 950908
NATIONAL APPLIC. NO.: US 525940 APPLIC. DATE: 950908
LANGUAGE: English
ABSTRACT: A protein encoded by a nucleic acid molecule (I) comprising a
dibasic amino acid processing endo-protease (II) gene nhTCP or a fragment encoding (II) having proteolytic activity is claimed. Also claimed are: a method to identify a compound that inhibits proteolytic cleavage by (II) encoded by (I), which involves contacting a Kex2 endo protease-deficient yeast strain transformed with (I) and containing a precursor protein with a dibasic amino acid processing site with a putative inhibitor under conditions in which in the absence of the compound the yeast strain effects cleavage of the precursor protein into products and assaying production of the products; and a method to identify a compound that inhibits (II). Compounds that inhibit (II) can be used to protect animals from disease caused by an infectious agent susceptible to inhibition of (II) activity or to immunomodulate an excessive immune response, e.g. in an autoimmune disease, to reduce the production of factors that stimulate tumor cell growth or to otherwise modulate autocrine, paracrine or endocrine function of cells that rely on (II) e.g. CD4+ T-lymphocytes. Use of (I) and (II) in therapy is possible. (50pp)

11/3,AB/66 (Item 36 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0233426 DBA Accession No.: 99-03527 PATENT
Novel reporter gene DNA-containing plasmid - expression in host cell for cancer and %%%autoimmune%%% disease therapy and %%%gene%%% %%%therapy%%%
AUTHOR: Hagiya H; Minami M; Tajima H
CORPORATE SOURCE: Osaka, Japan.
PATENT ASSIGNEE: Ono-Pharm. 1999
PATENT NUMBER: WO 9900491 PATENT DATE: 990107 WPI
ACCESSION NO.:
99-095737 (9908)
PRIORITY APPLIC. NO.: JP 97171440 APPLIC. DATE: 970623
NATIONAL APPLIC. NO.: WO 98JP2785 APPLIC. DATE: 980623
LANGUAGE: JA
ABSTRACT: A plasmid DNA containing DNA encoding a protein sequence,
preferably from a mouse or human Fas antigen, with a promoter, a GAL4 protein response sequence and a Fas antigen membrane linking region and function expression region is new. Also claimed are: a host cell; a method for screening for agonists or antagonists of the intracellular receptor; and a similar method for screening intracellular receptor agonists or antagonists in mouse fibroblast L-929 or HeLa cells, where the receptor is preferably PPAR-alpha, -gamma or- delta. The plasmid DNA and effector protein (specified) encoding the DNA are used as active ingredient in drugs to treat cancer or autoimmune diseases, as is the transformant cells. The transformant cells can also be applied in detection of ligand of an intranuclear receptor in a screening method for the intracellular receptor agonists or antagonists, particularly in mouse fibroblast L-929 or HeLa cells with receptor being PPAR-alpha, -gamma or -beta. (43pp)

11/3,AB/67 (Item 37 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0233408 DBA Accession No.: 99-03509 PATENT
Adenoviral vector for gene therapy contains splice site from eukaryotic nuclear gene - antisense RNA, ribozyme or therapeutic protein gene and splice sequence expression in eukaryotic host cell for cardiovascular, %%%autoimmune%%%, disease, cancer %%%gene%%% %%%therapy%%%
AUTHOR: Mehtali M; Leroy P; Michou A I
CORPORATE SOURCE: Strasbourg, France
PATENT ASSIGNEE: Transgene 1998
PATENT NUMBER: WO 9855639 PATENT DATE: 981210 WPI
ACCESSION NO.:
99-080833 (9907)
PRIORITY APPLIC. NO.: FR 976757 APPLIC. DATE: 970602
NATIONAL APPLIC. NO.: WO 98FR1105 APPLIC. DATE: 980602
LANGUAGE: French
ABSTRACT: A new vector (A), which is derived from the genome of an

adeno
virus vector (AdV) by deleting all or part of the E1 region, contains an expression DNA cassette for a selected gene (I) (e.g. antisense RNA, ribozyme or a therapeutic protein), under the control of elements (e.g. cytomegalo virus or Rous-sarcoma virus) needed for its expression in a host cell or organism, that contains at least one splice sequence (SS), which is derived from a eukaryotic nuclear gene for ovalbumin, alpha-or beta-globin, collagen or mammalian Factor-VIII or is synthetic, is claimed. Also claimed are: infectious virus particles (IVP) containing (A); and a eukaryotic host cell containing (A), or infected with IVP. (A), IVP and the host cell may be used for preventative or therapeutic gene transfer in humans and animals, particularly in cases of inherited diseases, e.g. hemophilia, muscular dystrophy, cystic fibrosis, autoimmune diseases, etc., developmental and progression of cancer, viral infections, e.g. HIV virus, hepatitis, etc. and cardiovascular disease, e.g. restenosis. (32pp)

11/3,AB/68 (Item 38 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0233326 DBA Accession No.: 99-03427 PATENT
New monoclonal or polyclonal antibodies reactive against anti-TCR-V-beta antibody - T-lymphocyte receptor-V-beta monoclonal antibody preparation, vector plasmid or virus expression in host cell, used for diabetes or autoimmune disease diagnosis, therapy or gene therapy
AUTHOR: Matossian-Rogers A
CORPORATE SOURCE: London, UK.
PATENT ASSIGNEE: Matossian-Rogers A 1999
PATENT NUMBER: GB 2327423 PATENT DATE: 990127 WPI
ACCESSION NO.:
99-073525 (9907)
PRIORITY APPLIC. NO.: GB 9715281 APPLIC. DATE: 970721
NATIONAL APPLIC. NO.: GB 9715281 APPLIC. DATE: 970721
LANGUAGE: English
ABSTRACT: A new monoclonal or polyclonal antibody or its equivalent ligand
is reactive against an anti-T-lymphocyte receptor (TLR)-V-beta antibody. Also claimed are: a peptide, oligopeptide, polypeptide or protein bound by the antibody; cDNA, RNA or a genomic DNA sequence
encoding the antibody; a phage clone containing the DNA; a plasmid or virus vector containing the DNA; a host cell transformed with the vector; and a method for detection of a naturally occurring autoantibody which involves contacting a blood, plasma or serum sample with the antibody and target molecules, and assessing the amount of autoantibody binding to the target molecules. The antibody, protein, DNA or vector may be used for therapy or gene therapy of insulin-dependent diabetes mellitus, non-insulin-dependent diabetes mellitus and organ or non-organ-specific autoimmune disease. The proteins and DNA may also be used as diagnostic agents, and administration is preferably by injection. In an example, a TLR-V-beta monoclonal antibody was prepared by conventional hybridoma methods.

11/3,AB/69 (Item 39 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0233243 DBA Accession No.: 99-03344 PATENT
New Apo-2DcR protein - is a member of the tumor necrosis factor receptor family, monoclonal antibody, humanized antibody, DNA sequence, etc. used in therapy and gene therapy to prevent apoptosis
AUTHOR: Ashkenazi A J; Baker K P; Chuntharapai A; Gurney A; Kim K J;
Wood W I
CORPORATE SOURCE: South San Francisco, CA, USA.
PATENT ASSIGNEE: Genentech 1998
PATENT NUMBER: WO 9858062 PATENT DATE: 981223 WPI
ACCESSION NO.:
99-095340 (9908)
PRIORITY APPLIC. NO.: US 878168 APPLIC. DATE: 970618
NATIONAL APPLIC. NO.: WO 98US12456 APPLIC. DATE: 980612
LANGUAGE: English
ABSTRACT: An isolated Apo-2DcR protein (I) of 259 amino acids having at
least 80% homology to native Apo-2DcR is claimed ((I) is a member of the tumor necrosis factor receptor family). Also claimed are: an isolated extracellular domain (ECD) of (I); fusion protein (II) comprising (I)/ECD fused to a heterologous protein; (I)/ECD-specific antibody; hybridoma especially from 4G3.9.9, 6D10.9.7 and 1C5.24.1 cell cultures producing chimeric antibody or humanized antibody which is monoclonal antibody; DNA sequences (IV) encoding (I)/ECD; a vector containing (IV) and host cells (CHO, Escherichia coli, etc.) containing the vector; a transgenic rat or transgenic mouse expressing (IV); and a knockout mouse/rat animal containing cells with an altered gene for (I). (II) are used to modulate apoptosis of mammalian cells and or NF-kappaB activation by Apo-2 ligand or other ligands. They may be expressed from (I) for in vivo or ex vivo gene therapy. (IV) is used for diagnostic tissue-typing and to create the transgenic animal, used for drug screening for agents that prevent excessive apoptosis e.g. in cases of neurodegeneration, autoimmune disease and inflammation. (88pp)

11/3,AB/70 (Item 40 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0232798 DBA Accession No.: 99-02899 PATENT
Method for augmenting the immune response in a mammal - vector-mediated osteoponin or osteoponin-antagonist expression in host cell, used for bacterium, virus, protozoon or parasite infection, cancer or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Young R A; Nau G J; Guilfoile P
CORPORATE SOURCE: Cambridge, MA, USA; Boston, MA, USA.
PATENT ASSIGNEE: Whitehead-Inst.Biomed.Res.; Gen.Hosp.Boston 1998
PATENT NUMBER: WO 9856405 PATENT DATE: 981217 WPI
ACCESSION NO.:
99-060027 (9905)
PRIORITY APPLIC. NO.: US 49260 APPLIC. DATE: 970610
NATIONAL APPLIC. NO.: WO 98US11940 APPLIC. DATE: 980609
LANGUAGE: English
ABSTRACT: A new method for augmenting an immune response in a mammal
involves increasing osteoponin activity in the mammal, where macrophage activity is increased, thereby enhancing the immune response. Also claimed is a method for reducing the immune response in an individual which involves decreasing osteoponin activity. The new method may be used for providing an immune response against Mycobacterium tuberculosis, to augment an immune response of a human to another pathogen selected from viruses, protozoa or parasites, or to enhance an immune response to cancer or tumor cells, foreign tissue of self tissue in autoimmune diseases such as rheumatoid arthritis or lupus erythematosus. A preferred method of augmenting an immune response involves administering: osteoponin or an active portion, derivative or analog; a DNA sequence encoding osteoponin or an active portion; a DNA
construct containing the DNA; cells modified to contain the DNA; or an osteoponin mimic. Reduction of an immune response involves administering an osteoponin mimic, an enzyme which degrades osteoponin; a DNA sequence encoding the mimic or enzyme; or an antibody that binds osteoponin and inhibits its activity. (39pp)

11/3,AB/71 (Item 41 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0232719 DBA Accession No.: 99-02820
Local gene therapy with CTLA4-immunoglobulin fusion protein in experimental
allergic encephalomyelitis - adeno virus vector-mediated cytotoxic T-lymphocyte antigen and immunoglobulin gene transfer and expression in human central nervous system for %%%autoimmune%%% disease %%%gene%%%
%%%therapy%%%
AUTHOR: Croxford J L; O'Neill J K; Ali R R; Browne K; Bymes A P; Dallman M J; Wood M J A; Feldmann M; Baker D
CORPORATE AFFILIATE: Univ.London-Inst.Ophthalmol. Kennedy-Inst.Rheumatol.London Univ.Oxford; Univ.Johns-Hopkins
CORPORATE SOURCE: Department of Clinical Ophthalmology, Institute of Ophthalmology, University College London, 11-43 Bath Street, London, EC1V 9EL, UK. email:jcroxford@hgmp.mrc.ac.uk
JOURNAL: Eur.J.Immunol. (28, 12, 3904-16) 1998

ISSN: 0014-2980 CODEN: EJIMAF
LANGUAGE: English
ABSTRACT: It has been previously reported that the induction phase of experimental allergic encephalomyelitis (EAE) is highly sensitive to systemic blockade of stimulation via major histocompatibility complex (MHC) class-II molecules and co-stimulation via the CD28:CD80/CD86
pathways. In contrast to this the effector phases of EAE have been reported to be relatively unaffected by similar treatments using MHC class-II antigen (Ag)-specific monoclonal antibodies (MAb) and cytotoxic T-lymphocyte antigen (CTLA)4-Ig fusion proteins. In this study, MHC class-II Ag-specific MAb and CTLA4-Ig were delivered directly into the central nervous system (CNS), via an adeno virus vector (AdCTLA) following EAE induction. Both were found to inhibit disease and the systemic administration of mouse CTLA4-Ig was also found to inhibit the progression of effector immune responses and these were significantly more active when delivered directly into the CNS. Local gene delivery of CTLA4-Ig mat therefore be an important target for immunotherapy of human autoimmune diseases. (50 ref)

11/3,AB/72 (Item 42 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0232629 DBA Accession No.: 99-02730 PATENT
New human formin-binding protein - recombinant protein preparation by vector-mediated gene transfer and expression in host cell, ribozyme, triple helix and antisense molecule, used for disease e.g. cancer therapy or gene therapy
AUTHOR: Hillman J L; Lal P
CORPORATE SOURCE: Palo Alto, CA, USA.
PATENT ASSIGNEE: Incyte-Pharm. 1998
PATENT NUMBER: WO 9856912 PATENT DATE: 981217 WPI
ACCESSION NO.:
99-070323 (9906)
PRIORITY APPLIC. NO.: US 872783 APPLIC. DATE: 970611
NATIONAL APPLIC. NO.: WO 98US11939 APPLIC. DATE: 980608
LANGUAGE: English
ABSTRACT: A purified human formin-binding protein of 151 amino acids and
its fragments is new. Also claimed are: an isolated nucleic acid (579 bp) that encodes the protein, its fragments and variants, sequences that hybridize to it and their complements; expression vectors; host cells (Escherichia coli); an antibody, agonists and antagonists; and a method for detecting a polynucleotide encoding the protein. The protein and its agonists (optionally expressed from gene therapy vectors) are used to treat developmental disorders, e.g. renal tubular acidosis, anemia, Cushing syndrome, epilepsy, spina bifida and congenital glaucoma. Antagonists are used to treat a wide range of cancers and diseases that involve immune suppression, autoimmunity or inflammation. The nucleic acid can be used as therapeutic antisense, triplex-forming or ribozyme molecules. (60pp)

11/3,AB/73 (Item 43 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0232603 DBA Accession No.: 99-02704 PATENT
New Siva protein - recombinant protein production via vector plasmid pAS2LMP1-mediated gene transfer and expression in yeast host cell, antibody, for cancer and autoimmune disease diagnosis and therapy
AUTHOR: Kanteti P V S; Ao Z; Schlossman S F
CORPORATE SOURCE: Boston, MA, USA.
PATENT ASSIGNEE: Dana-Farber-Cancer-Inst. 1998
PATENT NUMBER: WO 9854323 PATENT DATE: 981203 WPI
ACCESSION NO.:
99-059838 (9905)
PRIORITY APPLIC. NO.: US 865297 APPLIC. DATE: 970529
NATIONAL APPLIC. NO.: WO 98US10862 APPLIC. DATE: 980528
LANGUAGE: English
ABSTRACT: An isolated nucleic acid molecule (I) (NAM), which consists of a
DNA sequence (specified) which encodes a Siva protein, or its fragments, is new. Also claimed are: an isolated NAM consisting of a DNA sequence which encodes a protein, or protein fragment, where the protein, or its fragment, is encoded for by a protein sequence which is sufficiently homologous to the specified 189 or 124 amino acid protein sequences, such that the protein or fragment maintains the ability to modulate apoptosis if in a CD27-bearing cell; an isolated NAM, 15 nucleotides long (at least), which hybridizes to a Siva protein encoding NAM; an isolated NAM encoding a Siva fusion protein (Siva/non-Siva fusion); an antisense molecule of (I); a vector (e.g. plasmid pAS2LMP1) containing the Siva encoding NAM; a host cell (e.g. yeast strain HF7C) containing the above vector; an isolated Siva protein or fragment thereof, especially encoded by the 189 or 124 protein sequences; an antigenic Siva protein sequence, containing 8 amino acids plus from 189 or 124 protein sequences; and an antibody that specifically binds Siva. The above can be used to diagnose and treat cancer and autoimmune diseases. (87pp)

11/3,AB/74 (Item 44 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0232571 DBA Accession No.: 99-02672 PATENT
N-terminal fragment of gelsolin inducing apoptosis in mammalian cells - human recombinant gelsolin protein contained in a cytomegalo virus vector, caspase-3 substrate used for e.g. mamma, bladder cancer, %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Koths K; Kothakota S; Williams L T; Reinhart C
CORPORATE SOURCE: Emeryville, CA, USA.
PATENT ASSIGNEE: Chiron 1998
PATENT NUMBER: WO 9852597 PATENT DATE: 981126 WPI
ACCESSION NO.:
99-070127 (9906)
PRIORITY APPLIC. NO.: US 47080 APPLIC. DATE: 970519
NATIONAL APPLIC. NO.: WO 98US10181 APPLIC. DATE: 980518
LANGUAGE: English
ABSTRACT: An isolated N-terminal protein fragment (I) of gelsolin is claimed along with analogs, derivatives, etc. having deletions additions, etc. capable of inducing apoptosis in mammalian cells. Also claimed are: DNA sequences (II) encoding (I); a (II) where the sequence includes a human 1,056 bp sequence contained within a cytomegalo virus vector (ATCC 98312); a gene delivery vehicle comprising (II) operably linked to an expression control sequence; host cells transformed with this vector; and a method of sensitizing cells to apoptosis by administering (I) to gelsolin deficient cells and inducing apoptosis by administering chemotherapy or radiotherapy. The gene delivery vehicle is especially used to treat cancers characterized by gelsolin deficient cells such as mamma or bladder cancers, autoimmune disease, e.g. arthritis and hyperproliferation conditions. Gelsolin is reported to be a caspase-3 substrate involved in the actin cleavage associated with apoptosis. (II) can be used to produce antisense DNA and DNA probes useful for diagnosis purposes and in the prevention of apoptosis which is useful for treating autoimmune diseases. (46pp)

11/3,AB/75 (Item 45 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0232292 DBA Accession No.: 99-02393 PATENT
Supporting viability, proliferation and differentiation of dendritic cells - mammal hematopoietic stem cell and dendrite precursor cell co-culture, used for cancer, infectious disease or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%% or immunotherapy
AUTHOR: O'Neill H C; Ni K
CORPORATE SOURCE: Acton, Australian Capital Territory, Australia.
PATENT ASSIGNEE: Univ.Australian-Nat. 1998
PATENT NUMBER: WO 9855597 PATENT DATE: 981210 WPI
ACCESSION NO.:
99-045786 (9904)
PRIORITY APPLIC. NO.: AU 977230 APPLIC. DATE: 970606
NATIONAL APPLIC. NO.: WO 98AU428 APPLIC. DATE: 980605
LANGUAGE: English
ABSTRACT: A new method of supporting the viability, proliferation or differentiation of mammal dendrites or stem cells involves culturing a mammal hematopoietic cell population which forms a stromal layer which supports the dendrites or stem cells. Also claimed are: a similar method which involves co-culturing a mammal hematopoietic cell population with a stromal cell population; a method of producing a hematopoietic cell/stromal cell co-culture which involves depleting the stromal cells o non-adherent cells, irradiating the stromal cells,

overlaying a single cell suspension of hematopoietic cells, and culturing the cells in the presence of serum proteins so that dendrites or stem cells can develop from the hematopoietic cells; and a cell culture supernatant composition consisting of cell culture supernatant harvested from the stromal cell layer cultured by the new method. The new methods may be used to produce reliably stable and pure cultures of dendrites, especially dendrite precursor cells, and stem cells, useful in gene therapy or immunotherapy of cancer, infectious disease or autoimmunity. (97pp)

11/3,AB/76 (Item 46 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0232139 DBA Accession No.: 99-02240 PATENT
Membrane-bound chimeric receptor - vector expression in host cell, used for bacterium, fungus, protozoon or virus e.g. HIV virus infection, cancer or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Seed B; Romeo C; Kolanus W
CORPORATE SOURCE: Boston, MA, USA.
PATENT ASSIGNEE: Gen.Hosp.Boston 1998
PATENT NUMBER: US 5843728 PATENT DATE: 981201 WPI
ACCESSION NO.:
99-044582 (9904)
PRIORITY APPLIC. NO.: US 417495 APPLIC. DATE: 950405
NATIONAL APPLIC. NO.: US 417495 APPLIC. DATE: 950405
LANGUAGE: English
ABSTRACT: A new and specified 1,599 bp DNA sequence encodes a
membrane-bound chimeric receptor (I) and consists of an extracellular portion that specifically recognizes and binds a target cell or a target infective agent, and a transmembrane or intracellular portion of a T-lymphocyte receptor CD3, zeta or eta, a B-lymphocyte receptor or an Fc receptor, which is capable of signalling the cell to destroy a receptor-bound target cell or receptor-bound infective agent. The extracellular portion is preferably a portion of CD4 that binds HIV virus envelope, and the receptors can include a CD16 extracellular portion or a CD7 transmembrane or extracellular portion. Also new are: a vector containing the DNA; (I) produced by the new method; a protein consisting of T-lymphocyte receptor amino acids 421-532, 423-455, 438-455 of a specified 532 amino acid protein sequence; and cells expressing (I). The cells can be administered to mammals in order to destroy pathogens (e.g. bacteria, fungi, protozoa or viruses, especially HIV virus), cancer cells or autoimmune-generated cells. (57pp)

11/3,AB/77 (Item 47 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0230864 DBA Accession No.: 99-00965 PATENT
Leukocyte immunoglobulin-like receptor, LIR, polypeptides - virus recombinant glycoprotein UL18 and Fc fusion protein preparation, antibody, antisense nucleic acid and DNA probe, used for autoimmune disease diagnosis, therapy or gene therapy
AUTHOR: Cosman D J
CORPORATE SOURCE: Seattle, WA, USA.
PATENT ASSIGNEE: Immunex 1998
PATENT NUMBER: WO 9848017 PATENT DATE: 981029 WPI
ACCESSION NO.:
98-609990 (9851)
PRIORITY APPLIC. NO.: US 842248 APPLIC. DATE: 970424
NATIONAL APPLIC. NO.: WO 98US8244 APPLIC. DATE: 980423
LANGUAGE: English
ABSTRACT: A new leukocyte immunoglobulin-like receptor has at least 77%
identity to amino acids 5 to 50 of a specified 650 amino acid protein sequence. Also claimed are: a DNA sequence encoding the protein; DNA
that hybridizes to a DNA probe consisting of a fragment of the new DNA; a protein or fragment encoded by the DNA that is capable of binding to a ligand; an expression vector containing the DNA; a host cell containing the vector; an antibody immunoreactive with the protein; a fusion protein containing a fragment of the new protein sequence and an Fc region of immunoglobulin; and a fusion DNA construct encoding the fusion protein. The proteins and DNA may be used for therapy and gene therapy of autoimmune disease, and antibodies and antisense nucleic acid may be used for disease therapy. The DNA may also be used to design DNA probes for detecting the new DNA or for isolating related sequences from other spp. In an example, a virus glycoprotein UL18 was isolated and expressed as a fusion protein with Fc. The fusion protein was then used to screen cell lines for binding by standard flow cytometry. (112pp)

11/3,AB/78 (Item 48 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0230404 DBA Accession No.: 99-00505 PATENT
New peptides that generate antibodies against staphylococcal and streptococcal toxins - peptide consensus sequence used to generate antibody against staphylococcal and streptococcal toxin, for e.g. toxin detection
AUTHOR: Bannan J D; Zabriskie J B
CORPORATE SOURCE: New York, NY, USA.
PATENT ASSIGNEE: Univ.New-York-Rockefeller 1998
PATENT NUMBER: WO 9845325 PATENT DATE: 981015 WPI
ACCESSION NO.:
98-568335 (9848)
PRIORITY APPLIC. NO.: US 838413 APPLIC. DATE: 970407
NATIONAL APPLIC. NO.: WO 98US6663 APPLIC. DATE: 980401
LANGUAGE: English
ABSTRACT: Peptides, with the given consensus sequences, either on their own, or forming part of a larger protein molecule, are claimed. Also claimed are nucleic acids encoding the proteins, host cells containing the nucleic acids, and antibodies raised against the proteins. The peptides, and their nucleic acids, are used to generate serum antibodies that bind at least one staphylococcal enterotoxin or streptococcal endotoxin. The antibodies are used for diagnostic detection of these toxins in immunoassays. They can also be used to inhibit blastogenesis of human mononuclear cells in the presence of the toxins, and for passive immunization against the effects of the toxins. The antibodies raised from one of the peptide sequences also recognizes toxic shock syndrome toxin-1. The antibodies generated by the peptides are cross-reactive with toxins of a variety of bacteria. The peptides are based on conserved regions found in the bacterial toxins, and may be in the form of a monomer or a randomly crosslinked polymer, particularly where attached by C-terminal Cys residues, and optionally through a linker. The linker may also be immunogenic. Gene therapy is also disclosed. (69pp)

11/3,AB/79 (Item 49 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0228456 DBA Accession No.: 98-10053
Modulation of virus-induced delayed-type hypersensitivity by plasmid DNA encoding the cytokine interleukin-10 - plasmid vector-mediated gene transfer and expression in mouse muscle, used for virus infection or %%%autoimmune%%% disease cytokine-mediated %%%gene%%% %%%therapy%%%
AUTHOR: Manickan E; Daheshia M; Kuklin N; Chun S; +Rouse B T
CORPORATE AFFILIATE: Univ.Tennessee
CORPORATE SOURCE: Department of Microbiology, M409 Walters Life Science
Building, University of Tennessee, Knoxville, TN 37996-0845, USA.
JOURNAL: Immunology (94, 2, 129-34) 1998
ISSN: 0019-2805 CODEN: IMMUAM
LANGUAGE: English
ABSTRACT: The efficiency of eukaryotic expression plasmids encoding
interleukin-10, granulocyte-macrophage colony stimulating factor or beta-galactosidase (EC-3.2.1.23) at modulating the induction and expression of cutaneous delayed-type hypersensitivity (DTH) responses to virus infections was evaluated, by a single i.m. administration of cytokine DNA to BALB/c mice which were subsequently infected with either herpes simplex virus type-1 or vaccinia virus, and then tested for DTH. Responses in animals given interleukin-10 DNA were significantly suppressed for at least 5 wk after pretreatment, and animals also expressed diminished T-lymphocyte proliferative responses and modest changes in the balance of T-helper type-1 and type-2 T-lymphocyte reactions. Treatment of animals already sensitized to

express DTH also showed inhibited responses which took 6 to 7 days after treatment to become apparent. The results demonstrate the potency and convenience of plasmid DNA encoding cytokines to modulate inflammatory reactions and the method may be used for autoimmune disease or virus infection cytokine-mediated gene therapy. (24 ref)

11/3,AB/80 (Item 50 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0228365 DBA Accession No.: 98-09962 PATENT
New nucleic acid encoding the apoptosis-regulating protein Daxx and related vector - used to regulate Jun N-terminal kinase signal transduction, regulate Daxx-Fas binding, and to regulate apoptosis
AUTHOR: Yang X; Khosravi-Far R; Chang H Y; Baltimore D
CORPORATE SOURCE: Cambridge, MA, USA.
PATENT ASSIGNEE: Massachusetts-Inst.Technol. 1998
PATENT NUMBER: WO 9834946 PATENT DATE: 980813 WPI ACCESSION NO.:
98-447164 (9838)
PRIORITY APPLIC. NO.: US 51753 APPLIC. DATE: 980212
NATIONAL APPLIC. NO.: WO 98US2588 APPLIC. DATE: 980212
LANGUAGE: English
ABSTRACT: An isolated nucleic acid molecule that hybridizes under stringent conditions to a nucleic acid of given sequence, and which encodes a Fas-binding protein is claimed. Also claimed are nucleic acids that differ in sequence due to the redundancy of the genetic code, and complements of either of these molecules, as are fragments of between 12 and 2,215 bp of these molecules. An expression vector bearing these nucleic acids is also claimed, as is a host transformed by the vector. The claims also cover a protein (A) with a given sequence encoded by the nucleic acid, or fragments of it, and a protein that binds selectively to (A), or to a complex of (A) and Fas. Also claimed is a method of regulating Jun N-terminal kinase signal transduction in mammalian cells, by contact with (A) or an inhibitor of (A), and a composition containing an antisense molecule which reduces expression of (A). The use of this composition is claimed to decrease Daxx-Fas binding activity. A method of inducing apoptosis in a cell by contacting it with Daxx polypeptide, or fragment is also claimed as is a means of treating a condition characterized by abnormal Fas-mediated apoptosis. (89pp)

11/3,AB/81 (Item 51 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0228324 DBA Accession No.: 98-09921 PATENT
New DNA encoding p38-beta-2-kinase used to prevent, treat and diagnose, e.g. CNS disorders, cardiovascular disorders, inflammatory disorders, osteoporosis, AIDS, cachexia and autoimmune disorders - human recombinant enzyme preparation by vector-mediated gene transfer and expression in host cell, DNA probe, DNA primer, antibody, agonist and antagonist
AUTHOR: Kumar S
CORPORATE SOURCE: Philadelphia, PA, USA.
PATENT ASSIGNEE: SK-Beecham 1998
PATENT NUMBER: EP 859054 PATENT DATE: 980819 WPI ACCESSION NO.: 98-429682
(9837)
PRIORITY APPLIC. NO.: US 802191 APPLIC. DATE: 970218
NATIONAL APPLIC. NO.: EP 97309437 APPLIC. DATE: 971121
LANGUAGE: English
ABSTRACT: A new human DNA sequence has at least 85% identity to a specified 1,310 bp DNA sequence encoding a p38-beta-2-kinase (I) with a specified 364 amino acid protein sequence. Also new are: cDNA; a DNA probe or DNA primer containing at least 15 contiguous nucleotides of the new sequence; a DNA or RNA molecule which is an expression system, capable of producing (I) when present in a compatible host cell; a host cell containing the expression system; an antibody specific for (I); agonists and antagonists of (I) activity; and a DNA sequence obtained by screening an appropriate DNA library containing the (I) encoding gene under stringent hybridization conditions using a fragment of the new DNA as a DNA probe, and isolating the DNA sequence. Agonists and antagonists and DNA molecules may be used for therapy or gene therapy of central nervous system disorders, cardiovascular disorders, inflammatory disorders, osteoporosis, AIDS, cachexia and autoimmune disorders. The DNA may also be used for diagnosis by detecting mutations in the (I) encoding gene. In an example, the new DNA was isolated from human brain, heart and skeletal muscle. (23pp)

11/3,AB/82 (Item 52 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0228041 DBA Accession No.: 98-09638 PATENT
New nucleic acid encoding U4 hematopoietin receptor superfamily chain - and related transformed cell, protein and antibody, potentially useful for modulating cell proliferation or the immune response, for treating cancer, autoimmune disease, etc.
AUTHOR: Donaldson D D; Collins M; Neben T; Whitters M
CORPORATE SOURCE: Cambridge, MA, USA.
PATENT ASSIGNEE: Genet.Inst.Cambridge-Massachusetts 1998
PATENT NUMBER: WO 9831811 PATENT DATE: 980723 WPI ACCESSION NO.:
98-414109 (9835)
PRIORITY APPLIC. NO.: US 784863 APPLIC. DATE: 970116
NATIONAL APPLIC. NO.: WO 98US334 APPLIC. DATE: 980115
LANGUAGE: English
ABSTRACT: Claimed is an isolated DNA fragment (I) composed of (a) nucleotides (nt) 242-1396 of a 1656 bp sequence, (b) nt 71-1225 of a 1579 bp sequence, (c) a sequence equivalent to (a) or (b) within the degeneracy of the genetic code, (d) a sequence that hybridizes to, or is a species homolog of (a) or (b), or (e) an allelic variant of (a) or (b). Also claimed are: (A) host cells, particularly mammalian, transformed with (I); (B) isolated U4 proteins (II) with various claimed fragments with U4 hemoprotein receptor superfamily chain activity; (C) antibodies specific for (II); (D) nucleic acid encoding (II); and (E) a fusion protein including (II). (A) are used to produce recombinant U4 protein. (II) are used: to raise an antibody; as reagents for assays, tissue markers and screening for binding agents; for ligand and receptor isolation; as nutritional supplements; and in drugs affecting cell proliferation or differentiation; as immunostimulants or immunosuppressives or to regulate hematopoiesis. (I) are useful as tissue, mol.wt. or chromosomal markers, as DNA primers for genetic fingerprinting, and to yield anti-protein antibodies. (37pp)

11/3,AB/83 (Item 53 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0228019 DBA Accession No.: 98-09616 PATENT
New DNA encoding human cell death domain protein used to diagnose and treat diseases associated with enhanced or inhibited activity - e.g. Alzheimer disease, myocardial infarction, AIDS, osteoporosis, cancer and %%%autoimmune%%% disease therapy and %%%gene%%% %%%therapy%%%
AUTHOR: Emery J G
CORPORATE SOURCE: Philadelphia, PA, USA.
PATENT ASSIGNEE: SK-Beecham 1998
PATENT NUMBER: EP 857782 PATENT DATE: 980812 WPI ACCESSION NO.: 98-416005
(9836)
PRIORITY APPLIC. NO.: US 789355 APPLIC. DATE: 970127
NATIONAL APPLIC. NO.: EP 97309346 APPLIC. DATE: 971120
LANGUAGE: English
ABSTRACT: An isolated DNA sequence is claimed having at least 80% identity to a sequence encoding a death domain-1 (DD-1) protein (I) of 144 amino acids over its entire length, as well as a DNA sequence complementary to this above sequence. Also claimed are: DD-1 DNA sequences and proteins; methods for producing such proteins and host cells by recombinant techniques; antibody specific for DD-1; antagonists and agonists for DD-1 and methods for discovering them; methods for

utilizing DD-1 DNA sequences and proteins in the design of protocols for the treatment of diseases associated with an excess or inappropriate cell death, such as neurodegenerative disorders (including Alzheimer disease, Parkinson disease, cerebellar degeneration, and amyotrophic lateral sclerosis), ischemic injury (including stroke, myocardial infarction), AIDS, aplastic anemia, polycystic kidney disease, autoimmune disease, virus infections, among others; and diagnostic and susceptibility assays for such conditions. Diagnosis comprises determining the presence or absence of a mutation in the DD-1 gene and or analyzing the amount of DD-1 expression in a sample. (17pp)

11/3,AB/84 (Item 54 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0227959 DBA Accession No.: 98-09556 PATENT
New coupled or fusion polypeptides - herpes virus VP22 protein and p53 fusion protein preparation by plasmid p49532p+10 vector expression in microorganism or mammal cell, used for disease therapy or gene therapy, etc.
AUTHOR: O'Hare P F J; Elliott G D
CORPORATE SOURCE: London, UK.
PATENT ASSIGNEE: Marie-Curie-Cancer-Care 1998
PATENT NUMBER: WO 9832866 PATENT DATE: 980730 WPI
ACCESSION NO.:
98-427962 (9836)
PRIORITY APPLIC. NO.: GB 9716398 APPLIC. DATE: 970801
NATIONAL APPLIC. NO.: WO 98GB207 APPLIC. DATE: 980123
LANGUAGE: English
ABSTRACT: New coupled proteins or fusion proteins have a protein sequence
with the transport function of herpes virus VP22 protein and another protein sequence selected from: proteins for cell cycle control; suicide proteins that are conditionally cytotoxic or lethal upon administration, to a cell containing them, of a corresponding drug or activator compound; antigenic sequences or proteins, e.g. of greater than 12 amino acids from microorganism or virus antigens and tumor antigens; immunomodulating proteins; and therapeutic proteins. Also claimed are: a DNA sequence encoding the fusion protein or individual proteins including a diagnostic protein; and expression vector containing the DNA; and a microorganism or mammal cell containing the vector. The coupled proteins or fusion proteins may be used for modulating cell cycle control or apoptosis, for treating neurodegeneration, hyperproliferative disease, e.g. cancer or autoimmune disease such as restenosis, psoriasis or atherosclerosis, or virus infection. In an example, plasmid vector p49532p+10 encoding a VP22, p53 fusion protein was constructed. The DNA may be used for gene
therapy. (39pp)

11/3,AB/85 (Item 55 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0227607 DBA Accession No.: 98-09204 PATENT
New oligonucleotides that modulate expression of B7 proteins - human B7 protein oligonucleotide and DNA probe construction, used for cancer or inflammation or %%%autoimmune%%% disease diagnosis or %%%gene%%%
%%%therapy%%%
AUTHOR: Bennett C F; Vickers T A
CORPORATE SOURCE: Carlsbad, CA, USA.
PATENT ASSIGNEE: Isis-Pharm. 1998
PATENT NUMBER: WO 9829124 PATENT DATE: 980709 WPI
ACCESSION NO.:
98-387783 (9833)
PRIORITY APPLIC. NO.: US 777266 APPLIC. DATE: 961231
NATIONAL APPLIC. NO.: WO 97US23270 APPLIC. DATE: 971216
LANGUAGE: English
ABSTRACT: New oligonucleotides consisting of 8-30 (preferably 15-25)
nucleotides are able to specifically hybridize with, and modulate expression of a human DNA sequence encoding a B7 protein. The oligonucleotides may be used to modulate expression of B7 and T-lymphocyte activation and proliferation for therapy or prevention of inflammation or autoimmune diseases such as asthma, diabetes, myasthenia gravis, Graves disease, rheumatoid arthritis, allograft rejection, psoriasis, systemic lupus erythematosus, multiple sclerosis, contact dermatitis, rhinitis, allergy, cancer or metastases. The oligonucleotide may also be used to activate T-lymphocytes ex vivo, to determine or detect B7 expression, for diagnosis (e.g. DNA probe), as assay and purification reagents or to study B7 function. The oligonucleotide may be used in composition with an antiinflammatory or immunosuppressive, e.g. a soluble intracellular adhesion molecule, antibody-toxin conjugate, prednisone, prednisolone, azathioprine, cyclophosphamide, cyclosporin, interferon, sympathomimetic or histamine receptor-antagonist. (120pp)

11/3,AB/86 (Item 56 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0227205 DBA Accession No.: 98-08802 PATENT
New transgenic animals which lack functional H2-M gene - transgenic mouse construction, vector plasmid pUC mediated wild-type H2-Ma gene transfer to stem cell and microinjection into blastocyst for disease therapy
AUTHOR: Leung W P; Karlsson L; Zhou L; Peterson P A
CORPORATE SOURCE: Raritan, NJ, USA.
PATENT ASSIGNEE: Ortho 1998
PATENT NUMBER: EP 853122 PATENT DATE: 980715 WPI
ACCESSION NO.: 98-364648
(9832)
PRIORITY APPLIC. NO.: US 780949 APPLIC. DATE: 970110
NATIONAL APPLIC. NO.: EP 98300149 APPLIC. DATE: 980109
LANGUAGE: English
ABSTRACT: A fertile transgenic animal, specifically a mouse, whose somatic
and germ cells contain a gene coding for an altered H2-Ma gene (A) is claimed. (A) is targeted to replace the wild-type human H2-Ma gene in the animal or an ancestor of the animal at the embryonic stage, by microinjection of embryonic stem cells (ESCs) into blastocysts, or by coincubation of altered ESCs with fertilized eggs or morulae, followed by transplanting the blastocysts into a recipient mouse, and allowing it to develop normally. The resulting animal is capable of transmitting the altered gene to its offspring. The altered form of the H2-Ma gene is either non-functional or is derived from a species other than the mouse, including human H2-Ma. The process of producing this transgenic animal is also claimed. The claim also includes the breeding of the transgenic mice with wild-types to produce F1 heterozygotes, and breeding those F1 heterozygotes to produce F2 homozygous deficient mice, as well as the cell lines derived from any of these transgenic animals. This can be done via a plasmid pUC vector, linearized and electroporated into mouse ESCs. (21pp)

11/3,AB/87 (Item 57 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0227132 DBA Accession No.: 98-08729 PATENT
New nucleic acid encoding dendritic cell-specific peptides dectin-1 and -2 - vector-mediated gene transfer, expression in host cell and transgenic animal, dendrite tissue-specific gene expression, antibody, DNA probe, DNA primer, ribozyme and antisense sequence
AUTHOR: Ariizumi K; Takashima A
CORPORATE SOURCE: Austin, TX, USA.
PATENT ASSIGNEE: Univ.Texas-Syst. 1998
PATENT NUMBER: WO 9828332 PATENT DATE: 980702 WPI
ACCESSION NO.:
98-377594 (9832)
PRIORITY APPLIC. NO.: US 772440 APPLIC. DATE: 961220
NATIONAL APPLIC. NO.: WO 97US23761 APPLIC. DATE: 971222
LANGUAGE: English
ABSTRACT: DNA encoding mouse dectin-1 (244 amino acid protein sequence) and
-2 (199 amino acid protein sequence) is new. Also new are: a dendrite gene required for dendrite-mediated T-lymphocyte activation; a vector containing the DNA under control of a promoter; a host cell containing the DNA; a recombinant protein or fragment; DNA containing at least 14 contiguous nucleotides of the new DNA sequence or a complementary sequence; antibodies reactive with the proteins; an modulator of dendrite-mediated T-lymphocyte activity; DNA encoding a dectin promoter

and dectin ligands; and the production of transgenic animals that do not express the protein. The protein may be used for purifying T-lymphocytes, for detecting autoantibodies and to upregulate immunity, e.g. as a vaccine adjuvant. The new DNA may be used as a DNA probe or
DNA primer to identify related sequences and protein expression may be downregulated by antisense sequences or ribozymes for gene therapy of autoimmune disease or allergy. DNA encoding the dectin promoter may be
used for dendrite tissue-specific expression of an antigen for protective immunity, and the transgenic animals may be used for drug screening. (199pp)

11/3,AB/88 (Item 58 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0227128 DBA Accession No.: 98-08725 PATENT
Treating inflammatory bowel diseases, e.g. Crohn disease - human interleukin-9 DNA sequence, used for inflammatory bowel disease, Crohn disease, ulcerative colitis, multiple sclerosis, diabetes, arthritis, lupus or autoimmune disease therapy
AUTHOR: Levitt R C; Nicolaides N C
CORPORATE SOURCE: Plymouth Meeting, PA, USA.
PATENT ASSIGNEE: Magainin-Pharm. 1998
PATENT NUMBER: WO 9827997 PATENT DATE: 980702 WPI
ACCESSION NO.:
98-377404 (9832)
PRIORITY APPLIC. NO.: US 994986 APPLIC. DATE: 971219
NATIONAL APPLIC. NO.: WO 97US23527 APPLIC. DATE: 971222
LANGUAGE: English
ABSTRACT: A new method of alleviating inflammatory bowel disease (IBD) or
related disorders involves administering a compound that upregulates the function of interleukin-9 (IL-9, preferably human) or an IL-9 receptor. Also claimed are: monitoring humans undergoing IBD treatment with proteins containing an IL-9 sequence by evaluating levels of IL-9 in samples at different times; and screening for cells expressing a IL-9 receptor by detecting binding of a specific ligand. Compounds upregulating IL-9 or IL-9 receptor function may be used therapeutically to treat IBD and other inflammatory disorders including Crohn disease and chronic non-specific ulcerative colitis, multiple sclerosis, diabetes, arthritis, lupus and autoimmune diseases. IL-9 may be upregulated by an agonist peptide, IL-9 receptor antibody, human IL-9 analog or mutated DNA sequence which may be used in gene therapy. (61pp)

11/3,AB/89 (Item 59 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0226820 DBA Accession No.: 98-08417 PATENT
New mutant class-II transactivator proteins - recombinant protein preparation and nucleic acid for use in therapy and gene therapy
AUTHOR: Ting J P Y; Chin K C
CORPORATE SOURCE: Chapel Hill, NC, USA.
PATENT ASSIGNEE: Univ.North-Carolina 1998
PATENT NUMBER: WO 9825968 PATENT DATE: 980618 WPI
ACCESSION NO.:
98-348458 (9830)
PRIORITY APPLIC. NO.: US 35264 APPLIC. DATE: 961211
NATIONAL APPLIC. NO.: WO 97US22711 APPLIC. DATE: 971210
LANGUAGE: English
ABSTRACT: A new mutant class-II transactivator protein (CIITA), containing
amino acids deletion(s) in the proline, serine and threonine-rich domain, GTP binding motif domain or the C-terminal domain, are encoded by DNA (I). Also claimed are: mutant proteins selected from CIITA delta132-301, delta132-212, delta209-301, 1-931, 1-949, 1-1017, 1-1059 and 1-1089, CIITA-GTP1 deltaGK and KE, CIITA-GTP2 deltaDAYG, and
CIITA-GTP3 deltaSKAD, an antibody binding to mutant CIITA, DNA
hybridizing to (I), a recombinant vector containing (I), and a host cell containing the vector and expressing mutant CIITA. (I) can be used for downregulating expression of class-II major histocompatibility complex molecules, and for e.g. inhibiting organ transplant rejection or treating autoimmune disease. The DNA can be used for gene therapy, e.g. using a retro virus vector, homologous recombination or site-directed mutagenesis. In an example, the mammal expression vector, plasmid pcDNA3.FLAG.CIITA8 (FLAG.CIITA8) contained the FLAG epitope in
front of the first methionine of CIITA8. (33pp)

11/3,AB/90 (Item 60 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0226804 DBA Accession No.: 98-08401 PATENT
Human chemokine beta-13 polypeptide - recombinant protein preparation by vector expression in host cell and antibody, used for tumor or %%%autoimmune%%% disease diagnosis, therapy, %%%gene%%% %%%therapy%%%
or drug screening, etc.
AUTHOR: Li H; Seibel G
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: Hum.Genome-Sci. 1998
PATENT NUMBER: WO 9824908 PATENT DATE: 980611 WPI
ACCESSION NO.:
98-333327 (9829)
PRIORITY APPLIC. NO.: US 32432 APPLIC. DATE: 961205
NATIONAL APPLIC. NO.: WO 97US23144 APPLIC. DATE: 971205
LANGUAGE: English
ABSTRACT: A new human beta-13 chemokine (I) has at least 95% identity to a
specified 93 amino acid protein sequence (II). Also claimed are: a protein consisting of amino acids 25-93 or 29-93 of (II); (I) encoded by cDNA in clone (ATCC 97133); a protein consisting of a specified epitope-bearing portion of (II); a defined 282 bp DNA sequence encoding (I) or complementary DNA or a fragment; recombinant vectors containing the new DNA; host cells containing the vector; and an antibody that specifically binds (I). The new DNA and (I) may be used for diagnosis or therapy of immune system-related disorders in mammals (preferably humans), such as tumors, interstitial lung disease, leukemia, lymphoma or autoimmune diseases, etc. (I) may be used for therapy of sepsis, to inhibit bone marrow stem cell colony formation during cancer therapy, to regulate hematopoiesis or as a vulnerary agent, etc. Compositions containing the new DNA may be administered to express (I) for gene therapy of dysfunctions associated with aberrant endogenous (I) activity. Antibodies may be used for therapy and (I) may also be used for drug screening. (86pp)

11/3,AB/91 (Item 61 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0226385 DBA Accession No.: 98-07982 PATENT
DNA coding for human interleukin-16 polypeptide - recombinant protein production following vector expression in host cell and antibody for e.g. %%%autoimmune%%% disease therapy and %%%gene%%% %%%therapy%%%
CORPORATE SOURCE: Mannheim, Germany.
PATENT ASSIGNEE: Boehr.Mannheim 1998
PATENT NUMBER: DE 19648715 PATENT DATE: 980528 WPI
ACCESSION NO.:
98-298973 (9827)
PRIORITY APPLIC. NO.: DE 1048715 APPLIC. DATE: 961125
NATIONAL APPLIC. NO.: DE 1048715 APPLIC. DATE: 981125
LANGUAGE: German
ABSTRACT: A nucleic acid coding for interleukin-16 (IL-16) (protein sequence specified) is new and is optionally truncated by up to 8 amino acids at the C-terminus. Also claimed are: a prokaryotic or eukaryotic host cell transformed or transfected with the nucleic acid; a vector containing the nucleic acid; primate IL-16 produced by eukaryotic expression of the nucleic acid; human IL-16 produced by eukaryotic expression of the nucleic acid; an IL-16 encoded by the nucleic acid; and production of an antibody against an IL-16 by immunizing a mammal with an immunogen containing the first 3-20 amino acids of the specified sequence as a hapten. The protein is a multimer containing several subunits. The protein has 4-32 subunits and contains 0.5-2 metal ions per subunit. The nucleic acid is a cDNA molecule with a defined sequence of 353 bp. The protein may be used to treat

pathological states caused by viral replication, especially retro virus replication. It may also be used as an immunosuppressant, especially for treating autoimmune diseases, allergies and transplant rejection. The nucleic acid may also be used for gene therapy. (10pp)

11/3,AB/92 (Item 62 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0225963 DBA Accession No.: 98-07560 PATENT
New DNA encoding Fas ligand-agonist that includes a deletion of heterologous transmembrane domain - recombinant protein preparation and nucleic acid for use in %%%autoimmune%%% disease therapy and %%%gene%%%
%%%therapy%%%
AUTHOR: Chu K
CORPORATE SOURCE: Emeryville, CA, USA.
PATENT ASSIGNEE: Chiron 1998
PATENT NUMBER: WO 9821232 PATENT DATE: 980522 WPI
ACCESSION NO.:
98-297861 (9826)
PRIORITY APPLIC. NO.: US 968686 APPLIC. DATE: 971112
NATIONAL APPLIC. NO.: WO 97US20864 APPLIC. DATE: 971113
LANGUAGE: English
ABSTRACT: New DNA encoding a Fas ligand (FL)-agonist that is a deletion
mutant of pro-FL lacking a continuous segment of 10-17 amino acids starting at residue 130 of pro-FL (protein sequence specified); or is a chimera of the C-terminus of a non-cleavable transmembrane domain of a cell surface protein fused to the N-terminal extracellular domain of FL, lacking a continuous segment as defined above is claimed. The DNA can be contained on vectors which can be used to produce the agonist in transfected cells. The cells are used in vitro to identify cells that express Fas and in vivo or in vitro for reducing proliferation of Fas-expressing cells, specifically activated B-lymphocytes or T-lymphocytes. The agonist or the DNA encoding it can be used for the treatment of autoimmune disease e.g. multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, glomerulonephritis, myasthenia gravis, cystic fibrosis, diabetes type-I, etc., and transplant rejection. (75pp)

11/3,AB/93 (Item 63 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0225545 DBA Accession No.: 98-07142 PATENT
Multifunctional chimeric hematopoietic receptor agonist - chimeric recombinant hematopoietic receptor agonist preparation for tumor, infection or %%%autoimmune%%% disease therapy or %%%gene%%% %%%therapy%%%, etc.
AUTHOR: McWherter C A; Feng Y; McKearn J P; Summers N L; Staten N R;
Streeter P R; Minnerly J C; Minster N I; Woulfe S L
CORPORATE SOURCE: Chicago, IL, USA.
PATENT ASSIGNEE: Searle 1998
PATENT NUMBER: WO 9817810 PATENT DATE: 980430 WPI
ACCESSION NO.:
98-261504 (9823)
PRIORITY APPLIC. NO.: US 29629 APPLIC. DATE: 961025
NATIONAL APPLIC. NO.: WO 97US20037 APPLIC. DATE: 971023
LANGUAGE: English
ABSTRACT: A new hematopoietic protein has a sequence of formula (I), where
R1 and R2 are dependently selected from: (a) a human EPO receptor agonist protein sequence; (b) a human stem cell factor receptor agonist protein; (c) a human flt-3 receptor agonist ligand sequence; (d) a G-CSF protein sequence; (e) a human interleukin-3 protein sequence; (g) a c-mpl ligand sequence; (g) or a colony stimulating factor, a cytokine, a lymphokine, an interleukin or a hematopoietic growth factor, provided that at least R1 or R2 is selected from (a), (b) or (c). L1 is a linker capable of binding R1 to R2 and the hematopoietic protein may optionally be immediately preceded by methionine-1, alanine-1 or methionine-2, alanine-1. Also claimed are 12 defined DNA sequences encoding the protein. The new protein is a multifunctional chimeric receptor agonist and may be used to stimulate production of hematopoietic cells in a patient, for ex vivo expansion of hematopoietic cells, for production of dendritic cells or to treat hematopoietic disorders, tumors, infection or autoimmune disease. The new DNA may be used for gene therapy of hematopoietic disorders. (840pp)

11/3,AB/94 (Item 64 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0225505 DBA Accession No.: 98-07102 PATENT
Providing inflammation-responsive protein expression in cell - e.g. recombinant tumor necrosis factor receptor preparation by adeno virus vector-mediated gene expression in mouse cell, used for %%%autoimmune%%% disease therapy or %%%gene%%% %%%therapy%%%, etc.
AUTHOR: Munford R S
CORPORATE SOURCE: Austin, TX, USA.
PATENT ASSIGNEE: Univ.Texas-Syst. 1998
PATENT NUMBER: US 5744304 PATENT DATE: 980428 WPI
ACCESSION NO.:
98-271062 (9824)
PRIORITY APPLIC. NO.: US 456103 APPLIC. DATE: 950530
NATIONAL APPLIC. NO.: US 456103 APPLIC. DATE: 950530
LANGUAGE: English
ABSTRACT: A new method for providing inflammation-responsive protein
expression in a cell (e.g. mouse cell) involves: introducing into a cell a vector (e.g. adeno virus) containing a selected protein gene under the transcriptional control of a heterologous inflammation-responsive promoter (complement factor-3 or serum amyloid A3); and contacting the cell with a cytokine which activates the inflammation-responsive promoter gene. The protein is preferably a cytokine antagonist such as interleukin (IL)-1ra, tumor necrosis factor (TNF) receptor (preferred), IL-4, IL-10, adrenocorticotropic hormone, interferon-gamma, lymphotoxin receptor, prostaglandin-endoperoxide-synt hase (EC-1.14.99.1) or leukemia inhibitory factor receptor. The new method may be used to regulate cytokine response in an animal with systemic inflammation due to autoimmune diseases such as Sjogren syndrome, systemic lupus erythematosus, scleroderma, Graves disease, multiple sclerosis or rheumatoid arthritis. The new method may also be used to treat Kawasaki disease or malignancies of plasma cells such as multiple myeloma, or in organ transplant patients to alleviate the severity of rejection, etc. (17pp)

11/3,AB/95 (Item 65 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0225178 DBA Accession No.: 98-06775 PATENT
New deleted form of the Class-II trans activator that reduces Class-II antigen expression - recombinant protein production and ribozyme for use in %%%autoimmune%%% disease therapy and %%%gene%%% %%%therapy%%%,
and transgenic animal construction for xenotransplantation
AUTHOR: Fabre J W; Gustafsson K T; Yun S
CORPORATE SOURCE: London, UK.
PATENT ASSIGNEE: Inst.Child-Health-London 1998
PATENT NUMBER: WO 9815626 PATENT DATE: 980416 WPI
ACCESSION NO.:
98-240813 (9821)
PRIORITY APPLIC. NO.: GB 975911 APPLIC. DATE: 970321
NATIONAL APPLIC. NO.: WO 97GB2751 APPLIC. DATE: 971008
LANGUAGE: English
ABSTRACT: A new protein with the protein sequence of a Class-II transactivator (I), but with an N-terminal deletion which reduces the expression of major histocompatibility complex (MHC) Class-II antigens, is encoded by nucleic acid which can be contained on a vector and used to transform a host cell, tissue, organ or transgenic animal, preferably a transgenic pig. Also claimed is a ribozyme (RZ) targeted to bases 1,159-1,161 of human (I) and an antibody to (I). (I) and RZ are used to reduce expression of MHC class-II antigens, particularly for treatment of autoimmune disease, e.g. arthritis and diabetes, or to treat non-human animals as a source of xenografts. (I) and RZ may be generated in vivo by gene therapy, particularly using nucleic acid targeted for localized suppression of the immune response. Material from the transgenic animals are used for animal to human

transplantation. (I) suppresses production of Class-II antigens in cells that express them constitutively or after lymphokine induction. (103pp)

11/3,AB/96 (Item 66 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0225170 DBA Accession No.: 98-06767 PATENT
New isolated interleukin-1-beta-converting-enzyme-like protease - human recombinant LICE3 protein preparation by vector expression in Escherichia coli, used for virus infection, nervous system degeneration, autoimmune disease or cancer therapy, etc.
AUTHOR: Juan S C; Fletcher F A; Patterson S D
CORPORATE SOURCE: Thousand Oaks, CA, USA.
PATENT ASSIGNEE: Amgen 1998
PATENT NUMBER: WO 9814598 PATENT DATE: 980409 WPI
ACCESSION NO.:
98-240097 (9821)
PRIORITY APPLIC. NO.: US 724378 APPLIC. DATE: 961001
NATIONAL APPLIC. NO.: WO 97US16841 APPLIC. DATE: 970918
LANGUAGE: English
ABSTRACT: DNA encoding an interleukin-1-beta-converting-enzyme ((I),
EC-3.4.22.36) with a defined protein sequence and with at least one of the biological activities of human LICE3 is claimed, where the DNA is selected from; a defined DNA sequence; DNA that hybridizes to protein coding regions of the new DNA; or DNA which degenerates to the new DNA.
Also claimed are: an expression vector containing the DNA; a host cell (preferably Escherichia coli) transformed or transfected with the vector; (I) or a derivative with at least 60% homology to a protein which has at least one of the biological activities of LICE3; and an antibody (including monoclonal antibody) that specifically binds LICE3. LICE3 is a new cysteine protease with homology to (I) and are intracellular regulators of apoptosis. LICE3 agonists may be used to treat cancer by promoting tumor cell apoptosis. LICE3 antagonists e.g. antisense molecules may be used to treat conditions resulting from increased apoptosis such as virus infection (e.g. AIDS), nervous system degeneration (e.g. Parkinson disease or Alzheimer disease) or autoimmune disease. The new products may also be used for detection or diagnosis. (63pp)

11/3,AB/97 (Item 67 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0224384 DBA Accession No.: 98-05981 PATENT
New regulatory regions from the CD95 gene and transcription factors that interact with them - DNA and protein complexes and antisense sequences for use in therapy and gene therapy
AUTHOR: Watson J D; Rudert F
CORPORATE SOURCE: Auckland, New Zealand.
PATENT ASSIGNEE: Genesis-Res.Develop. 1998
PATENT NUMBER: WO 9808965 PATENT DATE: 980305 WPI
ACCESSION NO.:
98-179445 (9816)
PRIORITY APPLIC. NO.: US 713557 APPLIC. DATE: 960830
NATIONAL APPLIC. NO.: WO 97NZ107 APPLIC. DATE: 970829
LANGUAGE: English
ABSTRACT: New polynucleotides (DNA sequence specified), which can be cDNA,
genomic DNA, chemically synthesized and/or antisense, are capable of binding to a transcription factor (TF) to form a complex that modulates transcription of the CD95 gene. A DNA/protein complex with a mol.wt. of 47,000, 77,000 or 100,000 is capable of silencing transcription of a coding portion of the CD95 gene, and a complex with a mol.wt. of 59,000, 113,000 or 200,000-300,000 is capable of enhancing transcription of a coding portion of the CD95 gene. The products can be used to modulate apoptotis or to modulate CD95 expression, where the protein has a cold shock domain with at least 95% identity to the cold shock domain of human YB-1 (EMBL M24070, SWISS-PROT P16990), or at
least 95% identity to human Puralpha (EMBL M96684, SWISS-PROT Q00577),
human hnRNP-D (EMBL D55672, SWISS-PROT Q14101 and Q14103) or to a
protein encoded by a claimed DNA sequence. Applications include cancer, virus infection, neurodegeneration and autoimmune disease therapy, e.g. by gene therapy for expressing TF or expression of antisense sequences. (60pp)

11/3,AB/98 (Item 68 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0224367 DBA Accession No.: 98-05964 PATENT
Human endoglin gene promoter - DNA construct insertion into plasmid or virus vector for cancer, %%%autoimmune%%% disease, etc. %%%gene%%%
%%%therapy%%%
AUTHOR: Graulich W; Nettelbeck D; Sedlacek H H; Mueller R
CORPORATE SOURCE: Frankfurt, Germany.
PATENT ASSIGNEE: Hoechst 1998
PATENT NUMBER: DE 19704301 PATENT DATE: 980326 WPI
ACCESSION NO.:
98-180486 (9817)
PRIORITY APPLIC. NO.: DE 1004301 APPLIC. DATE: 970206
NATIONAL APPLIC. NO.: DE 1004301 APPLIC. DATE: 970206
LANGUAGE: German
ABSTRACT: A new endoglin gene promoter has at least part of a defined 2,415
bp DNA sequence and activates transcription of an effector gene. Also claimed is a DNA construct containing the promoter sequence. The DNA construct preferably contains an effector gene downstream of the promoter which is combined with a virus-specific, metabolically-specific, cell-specific or cell-cycle-specific enhancer. The new constructs containing the promoter may be used with a gene encoding: a cytokine, chemokine or growth factor (or a receptor); an antiproliferative, cytostatic or apoptotic protein; an antibody or antibody fragment; an angiogenesis-inhibitor; a clotting factor or inhibitor, a fibrinolytic protein, a circulatory active protein; or an immunogen or an enzyme that converts a prodrug into a drug. The new constructs may be inserted into plasmid or virus vectors and used for gene therapy of tumors, leukemia, autoimmune diseases, allergies, arthritis, inflammations, organ rejection, graft-versus-host disease, clotting disorders, circulatory disorders, anemia, infection or central nervous system damage. (18pp)

11/3,AB/99 (Item 69 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0224274 DBA Accession No.: 98-05871 PATENT
BH3-interacting domain death-agonist polypeptide - recombinant protein and fusion protein preparation by vector expression in host cell, and antisense DNA, used for cancer, virus infection or %%%autoimmune%%%
disease therapy or %%%gene%%% %%%therapy%%%
AUTHOR: Korsmeyer S J
CORPORATE SOURCE: St. Louis, MO, USA.
PATENT ASSIGNEE: Univ.Washington-St.Louis 1998
PATENT NUMBER: WO 9809980 PATENT DATE: 980312 WPI
ACCESSION NO.:
98-193546 (9817)
PRIORITY APPLIC. NO.: US 706741 APPLIC. DATE: 960909
NATIONAL APPLIC. NO.: WO 97US15872 APPLIC. DATE: 970909
LANGUAGE: English
ABSTRACT: The following are new: a protein (I) with a defined BH3-interacting domain death-agonist (BID) protein sequence; a fusion protein consisting of (I) and a heterologous protein sequence (enhances intracellular delivery of the BID protein); specified DNA sequences encoding (I) and fragments; a DNA isolate containing the new DNA; a vector containing the DNA linked to expression regulatory elements; a host cell transformed with the vector; antibodies that react with a BID protein or an epitope for detection of a BID protein in a cell sample; and an antisense BID sequence with a complementary sequence that is capable of hybridizing with a naturally occurring DNA or mRNA sequence
encoding the BID protein to prevent transcription and/or translation of an encoded BID protein. (I), the DNA or antisense sequence may be used to prevent or treat decreased apoptotic state of a cell resulting from

cancer, virus infection, lymphoproliferative conditions, arthritis, inflammation or autoimmune disease. The DNA may be used to treat e.g. AIDS, senescence, neurodegenerative disease, ischemic and reperfusion cell death, infertility or wound healing. (118pp)

11/3,AB/100 (Item 70 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0223961 DBA Accession No.: 98-05558 PATENT
New chimeric adeno virus fiber protein - recombinant protein preparation by plasmid or adeno virus vector expression in host, used for cancer, pathogenic infection or %%%autoimmune%%% disorder therapy or %%%gene%%% %%%therapy%%%
AUTHOR: Wickham T J; Roelvink P W; Kovesdi I
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: GenVec 1998
PATENT NUMBER: WO 9807865 PATENT DATE: 980226 WPI
ACCESSION NO.:
98-169169 (9815)
PRIORITY APPLIC. NO.: US 701124 APPLIC. DATE: 960821
NATIONAL APPLIC. NO.: WO 97US14719 APPLIC. DATE: 970821
LANGUAGE: English
ABSTRACT: The following are claimed: a chimeric adeno virus fiber protein
(I) with a constrained nonnative protein sequence; DNA encoding (I); a transfer vector containing the DNA (specified plasmid vectors); a vector containing (I) (specified adeno virus vectors); a method of genetically modifying a cell which involves contacting the cell with one of the vectors; a host cell containing one of the vectors; a method of increasing the affinity of a peptide for a cell surface binding site which by obtaining a wild-type (I) and inserting into, or in place of, a protein sequence in a loop of the knob of wild-type (I), a nonnative protein sequence (NPS) resulting in chimeric (I); a method of increasing the affinity of an RGD sequence for a cell surface binding site which involves inserting an RGD sequence into wild-type (I) so that it is flanked by one or more cysteine pairs and is capable of forming a loop due to interaction between the cysteines. The NPS sequence allows the chimeric fiber to efficiently bind and enter the cells. The products may be used for gene therapy or therapy of cancer, genetic disorders, pathogenic infection or autoimmune disorders. (123pp)

11/3,AB/101 (Item 71 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0223237 DBA Accession No.: 98-04834 PATENT
New fusion polypeptide comprising immunoglobulin E-binding domain and human serum albumin - recombinant fusion protein for use in therapy, transgenic animal, and gene for use in gene therapy of autoimmune disease and allergy
AUTHOR: Digan M E; Lake P; Gram H
CORPORATE SOURCE: Basle, Switzerland.
PATENT ASSIGNEE: Novartis 1998
PATENT NUMBER: WO 9804718 PATENT DATE: 980205 WPI
ACCESSION NO.:
98-130705 (9812)
PRIORITY APPLIC. NO.: US 690216 APPLIC. DATE: 960726
NATIONAL APPLIC. NO.: WO 97EP4066 APPLIC. DATE: 970725
LANGUAGE: English
ABSTRACT: A new fusion protein (I) comprises at least 1 IgE binding domain
(A) (IgE receptor) fused to at least 1 human serum albumin component, its salts and physiological equivalents are claimed. Also claimed are: nucleic acid (II) encoding (I); vectors containing (II); and non-human, somatic recombinant or transgenic animals expressing (I). (I) are used to treat allergies or other IgE-mediated diseases, particularly atopic dermatitis, atopic asthma, or chronic urticaria, but also hayfever, eczema, anaphylaxis or other pulmonary, dermatological or autoimmune diseases. (II) can be administered to cells ex vivo, then these returned to the patient or administered directly for gene therapy. (I) are also useful as immunoassay reagents, for in vitro diagnosis and monitoring, and to determine the level of IgE or autoantibodies to the IgE receptor Fc-iRI-alpha. The transgenic animals produce (I) e.g. in their milk or are disease models. Compared with (A) alone, (I) have longer serum life and thus greater activity, without loss of ability to bind serum IgE or circulating autoantibodies. Binding is increased when more than 1 (A) is present in the molecule. (77pp)

11/3,AB/102 (Item 72 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0221732 DBA Accession No.: 98-03329 PATENT
Inhibiting synthesis of invariant chain protein using antisense mRNA or oligonucleotides - for cancer, virus infection or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Humphreys R E
CORPORATE SOURCE: Worcester MA, USA.
PATENT ASSIGNEE: Antigen-Express 1997
PATENT NUMBER: WO 9747326 PATENT DATE: 971218 WPI
ACCESSION NO.:
98-052032 (9805)
PRIORITY APPLIC. NO.: US 661627 APPLIC. DATE: 960611
NATIONAL APPLIC. NO.: WO 97US10084 APPLIC. DATE: 970609
LANGUAGE: English
ABSTRACT: A new expressible antisense construct contains DNA (e.g. a cDNA) encoding a 1st mRNA, which is complementary to a 2nd mRNA encoding a mammal Ii (invariant chain) protein, and inhibits translation of the 2nd mRNA on hybridization. The 1st mRNA may be complementary along the entire length or only part of the Ii coding sequence. An oligonucleotide with these properties is also new, and may be complementary to a translation initiation site, may inhibit intron splicing (if complementary to a portion of the 3'-end of the 1st exon and a portion of the 5'-end of the 1st intron), or may be complementary to a region 3' of the termination codon. A major histocompatibility complex class-II-positive antigen-presenting cell, e.g. a leukemia, lymphoma or melanoma cell with a tumor-associated antigen displayed on the surface, may contain an inhibitor of Ii expression, or may express the antisense construct. A transfected class-II-positive malignant melanoma, leukemia or lymphoma cell line may be used for ex vivo cancer gene therapy, or the method may be used to eliminate virus-infected cells or in therapy of autoimmune disease. (35pp)

11/3,AB/103 (Item 73 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0221700 DBA Accession No.: 98-03297
Cloning and expression of murine IFN-beta and a TNF antagonist for gene therapy of experimental allergic encephalomyelitis - retro virus vector ApHRO and Hermes construction and expression in multiple sclerosis mouse model
AUTHOR: Triantaphyllopoulos K A; Croxford J L; Baker D; +Chernajovsky Y
CORPORATE AFFILIATE: Kennedy-Inst.Rheumatol.London Univ.London
CORPORATE SOURCE: Kennedy Institute of Rheumatology, 1 Aspenlea Road, Hammersmith, London W6 8LH, UK.
JOURNAL: Gene Ther. (5, 2, 253-63) 1998
ISSN: 0969-7128 CODEN: GETHEC
LANGUAGE: English
ABSTRACT: The mouse interferon-beta (IFN-b) gene was cloned into retro virus vector plasmid pBabeBleo. The resulting vector, ApHRO, was tested for expression by transient transfections in COS-7 and in NB100 neuroblastoma cells. The IFN-b gene product was detected in the supernatants of COS-7 transfectants as a band of mol.wt. 18,000. In order to achieve tissue-specific gene expression, constructs were assembled with a poly(A) signal carrying the rat neuron-specific enolase promoter; this resulted in expression in neuroblastoma cells but not in COS-7 cells. The extracellular domain of the human p55 tumor necrosis factor receptor linked to an immunoglobulin sequence (TNFR/Ig) was cloned into pBabeBleo resulting in expression vector Hermes. These constructs were evaluated by direct intracranial injections of DNA-liposome complexes during the induction phase of experimental

allergic encephalomyelitis, a mouse model of multiple sclerosis. Expression of human p55 TNFR/Ig showed a highly active TNF inhibitor protecting WEHI 164 cells from cytotoxic TNF. The genetically engineered cells may be used for ex vivo gene therapy studies in inflammation and autoimmune diseases. (44 ref)

11/3,AB/104 (Item 74 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0221161 DBA Accession No.: 98-02758 PATENT
Treatment of autoimmune diseases - e.g. rheumatoid arthritis or multiple sclerosis using an antigen-coated particle or gene therapy DNA construct
AUTHOR: Haynes J R; Prayaga S K; Ramshaw I A
CORPORATE SOURCE: Madison, WI, USA.
PATENT ASSIGNEE: Auragen 1997
PATENT NUMBER: WO 9746253 PATENT DATE: 971211 WPI
ACCESSION NO.:
98-041982 (9804)
PRIORITY APPLIC. NO.: US 19100 APPLIC. DATE: 970603
NATIONAL APPLIC. NO.: WO 97US9427 APPLIC. DATE: 970603
LANGUAGE: English
ABSTRACT: A new method for treating or preventing an autoimmune disease in
a mammal involves: providing a particle (average diameter 0.5-5 um, e.g. gold or tungsten) coated with an antigen against which an immune response is mounted in the autoimmune disease; delivering the particle into the recipient cell (e.g. skin or mucosal cell) of the mammal; and repeating the step until there is a reduction in a cytotoxic or desensitizing immune response. An alternative method involves providing a DNA construct containing a coding sequence for an antigen, which may be linked to control elements so that the coding sequence can be transcribed and translated in the recipient cell. The cytotoxic immune response is characterized by T-lymphocyte secretion of e.g. interleukin (IL)-2, interferon-gamma and tumor necrosis factor from T-lymphocytes, and the desensitizing immune response is characterized by T-lymphocyte secretion of e.g. IL-4, IL-5, IL-6 or IL-10. The method may be used to treat rheumatoid arthritis using e.g. collagen or the Mycobacterium tuberculosis heat shock protein Mt Hsp65, or multiple sclerosis using e.g. myelin basic protein, myelin oligodendrocyte, proteolipid protein. (72pp)

11/3,AB/105 (Item 75 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0221008 DBA Accession No.: 98-02605 PATENT
Tumor antigen peptide, DNA coding for it, and antibodies recognizing it - recombinant tumor-associated antigen and encoding gene for use in tumor or %%%autoimmune%%% disease therapy or %%%gene%%% %%%therapy%%%
AUTHOR: Schichijo S; Imai Y
CORPORATE SOURCE: Japan.
PATENT ASSIGNEE: Itoh K 1997
PATENT NUMBER: WO 9746676 PATENT DATE: 971211 WPI
ACCESSION NO.:
98-042184 (9804)
PRIORITY APPLIC. NO.: JP 96330424 APPLIC. DATE: 961125
NATIONAL APPLIC. NO.: WO 97JP1893 APPLIC. DATE: 970604
LANGUAGE: JA
ABSTRACT: DNA (I) encoding a tumor antigen protein (800 residues of
disclosed protein sequence) or proteins derived from it by addition, substitution or deletion of any 1 or more amino acid residues is claimed. The protein forms fragments on intracellular digestion which bind to major histocompatibility complex class I antigens to form a complex which is recognized by T-lymphocytes. Also claimed is DNA (Ia)
hybridizing to (I); plasmid expression vectors containing (I); transformed hosts containing the vectors; tumor antigen protein prepared by culturing the transformants; antibodies specific to the protein and its fragments; fragments of the protein; and DNA and RNA sequences encoding or associated with the protein. (I) is useful for gene therapy of tumors and autoimmune diseases. (49pp)

11/3,AB/106 (Item 76 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0220577 DBA Accession No.: 98-02174 PATENT
Utrons, RNA molecules containing promoter regulatory motifs - promoter regulatory motif-containing RNA molecule and expression in recombinant cell and transgenic animal for %%%autoimmune%%% and inflammatory disease %%%gene%%% %%%therapy%%%
AUTHOR: Peyman J A
CORPORATE SOURCE: New Haven, CT, USA.
PATENT ASSIGNEE: Univ.Yale 1997
PATENT NUMBER: WO 9744450 PATENT DATE: 971127 WPI
ACCESSION NO.:
98-018505 (9802)
PRIORITY APPLIC. NO.: US 646789 APPLIC. DATE: 960521
NATIONAL APPLIC. NO.: WO 97US9459 APPLIC. DATE: 970521
LANGUAGE: English
ABSTRACT: A ss nucleic acid (NA) molecule (I) is new and contains a 1st
nucleotide sequence, containing at least one promoter regulatory motif, contiguous with a 2nd nucleotide sequence of at least 20 nucleotides that is not naturally contiguous with the 1st in any naturally occurring NAs containing the motif. Also claimed are: an isolated ss RNA molecule containing at least 2 component structures selected from a stem loop component, a hairpin component structure or a bulge component structure; an isolated NA having 1 of 2 481 bp NA sequences (specified); an isolated RNA having 1 of 3 RNA sequences (specified); an isolated NA containing 1 of 3 DNA sequences (specified); an isolated ss RNA containing one or more of 9 specified promoter regulatory motifs; an isolated ss DNA containing 1 or more of the 2 specified sequences; an isolated ss DNA containing 1 of 4 specified sequences; a recombinant cell containing the NA; and a non-human transgenic animal containing the NA. The NAs may be used to regulate gene expression in a human or a cell in vitro for application in %%%autoimmune%%% and inflammatory disease %%%gene%%% %%%therapy%%%. (200pp)

11/3,AB/107 (Item 77 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0220569 DBA Accession No.: 98-02166 PATENT
In vivo selection of cells resistant for a specific agent, by administering the agent - e.g. multidrug-resistance gene transfer, for baboon transgenic animal or transgenic pig construction, or Lesch-Nyhan syndrome, %%%autoimmune%%% disease or AIDS %%%gene%%% %%%therapy%%%
AUTHOR: Schiestl R H; Aubrecht J
CORPORATE SOURCE: Cambridge, MA, USA.
PATENT ASSIGNEE: Harvard-Coll. 1997
PATENT NUMBER: WO 9743900 PATENT DATE: 971127 WPI
ACCESSION NO.:
98-018116 (9802)
PRIORITY APPLIC. NO.: US 18239 APPLIC. DATE: 960524
NATIONAL APPLIC. NO.: WO 97US8788 APPLIC. DATE: 970522
LANGUAGE: English
ABSTRACT: A new method for selecting cells in vivo involves providing a
selective agent in vivo at a dose non-toxic to resistant cells and toxic to non-resistant cells (either of which may be recombinant), resulting in replacement of non-resistant cells. The resistant cells may be hypoxanthine-phosphotransferase (EC-2.4.2.8) negative, or may have neomycin-resistance or hygromycin-resistance, and may be from a Lesch-Nyhan syndrome patient. The replacement cells may be a xenotransplant from a baboon or pig. Another transgene may be present. The cells may be selected with 6-thioguanine, 8-azaguanine, 6-mercaptopurine, hygromycin-B, G418, diphtheria toxin, ouabain or anti-HLA antibody. Selection may be carried out on bone marrow cells or in utero, or selection may be performed for embryos in vitro. An antisense sequence for a susceptibility gene may be used. The method may be used to select for transgenic animals in utero, e.g. for use in xenotransplantation. Multidrug-resistance MDR1 gene transfer to bone marrow hematopoietic stem cells may be used in gene therapy of Lesch-Nyhan syndrome, autoimmune disease or HIV virus infection. (80pp)

11/3,AB/108 (Item 78 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0219398 DBA Accession No.: 98-00995 PATENT
Producing cytokines associated with Th2-type helper T-cells by control of transcription factor - activated T-lymphocyte nuclear factor gene transfer to helper T-lymphocyte, B-lymphocyte or hematopoietic stem cell, for e.g. allergy, cancer, infection or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Glimcher L H; Hodge M R; Ho I C
CORPORATE SOURCE: Cambridge, MA, USA.
PATENT ASSIGNEE: Univ.Harvard 1997
PATENT NUMBER: WO 9739721 PATENT DATE: 971030 WPI
ACCESSION NO.:
97-535556 (9749)
PRIORITY APPLIC. NO.: US 755592 APPLIC. DATE: 961125
NATIONAL APPLIC. NO.: WO 97US6708 APPLIC. DATE: 970423
LANGUAGE: English
ABSTRACT: A new method for modulating production of a type-2 helper
T-lymphocyte (Th2)-associated cytokine, e.g. interleukin-4, involves contacting a host cell with an agent that modulates expression or activity of a transcription factor (TF, e.g. a Th2-specific TF, maf family protein (e.g. c-Maf or p18) or mouse or human NIP45), where the TF cooperates with a nuclear factor of activated T-cells (NF-AT) family protein (particularly the Rel homology domain) to regulate cytokine expression. The agent may act intracellularly, and may be sense or antisense DNA encoding the TF (optionally in a vector), or an intracellular binding molecule. The cell may be a type-1 helper T-lymphocyte (Th1), B-lymphocyte or non-lymphoid cell, e.g. a hematopoietic stem cell. The cells may be administered to modulate Th1 or Th2 cells in a subject, e.g. as a form of gene therapy for allergy, cancer, infection or autoimmune disease. A monoclonal antibody against NIP45 protein, and a diagnostic DNA probe, are also new. A new non-human transgenic animal model has an altered endogenous NIP45 gene,
and/or a transgene encoding a maf family protein, expressed in T-lymphocytes. (151pp)

11/3,AB/109 (Item 79 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0218514 DBA Accession No.: 98-00111 PATENT
New T-lymphocyte veto molecule comprising response cell activating protein - and an antibody, growth factor or tissue-specific antigen protein, and expression in cell culture, for use as an immunosuppressive or in %%%autoimmune%%% disease etc. %%%gene%%% %%%therapy%%%
AUTHOR: Staerz U D
CORPORATE SOURCE: Denver, CO, USA.
PATENT ASSIGNEE: Nat.Jewish-Cent.Immunol.Resp.Med.Denver 1997
PATENT NUMBER: WO 9737687 PATENT DATE: 971016 WPI
ACCESSION NO.:
97-512419 (9747)
PRIORITY APPLIC. NO.: US 630172 APPLIC. DATE: 960410
NATIONAL APPLIC. NO.: WO 97US5943 APPLIC. DATE: 970410
LANGUAGE: English
ABSTRACT: A new T-lymphocyte veto molecule is a chimeric protein containing
a CD4, CD2, CD28, cytotoxic T-lymphocyte antigen-4, Fas ligand, CD5, CD7, CD9, CD11, CD18, CD27, CD43, CD45, CD48, B7.1 or B7.2 fragment,
linked to a targeting protein which binds to a host-specific protein but not a tissue graft cell. The 1st protein is from a human, primate (e.g. baboon), pig, mouse, rat, rabbit, horse, goat or hamster. The targeting protein is preferably Ig WFL4F12.3, WFL3C6.1, BB7.2, PA2.1, 2.28M1, MA2.1, GAP-A3, A11.1M, 4D12, BB7.1, B27M1, ME1, BB7.6, MB40.2,
B27M2, SFR8-B6, Genox-3.53, G2a.5 or SFR3-DR5, or a growth factor or
tissue-specific antigen. DNA encoding the 2 proteins may be in separate vectors, followed by disulfide bond formation after expression. The targeting protein may target a stimulator cell involved in an autoimmune response. The host cell may be a fibroblast, pluripotent progenitor cell, epithelium, neural cell, T-lymphocyte or B-lymphocyte cell. The recombinant protein or recombinant cells may be used in therapy or gene therapy of autoimmune disease, allergy or other immunological disorders. (116pp)

11/3,AB/110 (Item 80 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0217287 DBA Accession No.: 97-12408 PATENT
Rapid expansion method for T cells in vitro - retro virus for gene therapy and T-lymphocyte culture for adoptive immunotherapy of autoimmune disease
AUTHOR: Flyer D C; Clary K W
CORPORATE SOURCE: Seattle, WA, USA.
PATENT ASSIGNEE: Targeted-Genet. 1997
PATENT NUMBER: WO 9732970 PATENT DATE: 970912 WPI
ACCESSION NO.:
97-457530 (9742)
PRIORITY APPLIC. NO.: US 610710 APPLIC. DATE: 960304
NATIONAL APPLIC. NO.: WO 97US3293 APPLIC. DATE: 970303
LANGUAGE: English
ABSTRACT: A new method for expanding rapidly an initial T-lymphocyte
population in culture medium in vitro involves: adding an initial T-lymphocyte population to a culture medium in vitro; adding to the culture medium a non-dividing mammalian cell line expressing at least one T-lymphocyte-stimulatory component, where the cell line is not an Epstein-Barr virus (EBV)-transformed lymphoblastoid cell line; and incubating the culture. Also claimed are: a method for genetically transducing a human T-lymphocyte, which involves adding an initial T-lymphocyte population to a culture medium in vitro, adding to the culture medium a non EBV-transformed mammalian cell line expressing a T-lymphocyte-stimulatory component, incubating the culture and adding a vector (retro virus vector) to the culture medium; a method for generating a REM cell line capable of promoting rapid expansion of an initial T-lymphocyte population in vitro, which involves depleting one or more cell types from a human peripheral blood mononuclear cell population and using the population in an hp-REM protocol to determine the contribution of the depleted cell type to the activity; and a culture medium. (60pp)

11/3,AB/111 (Item 81 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0216526 DBA Accession No.: 97-11647 PATENT
Shaker-like potassium ion channel N-terminal A and B box polypeptides - recombinant protein for use in therapy and nucleic acid for use in gene therapy
AUTHOR: Li M
CORPORATE SOURCE: Baltimore, MD, USA.
PATENT ASSIGNEE: Univ.Johns-Hopkins 1997
PATENT NUMBER: WO 9731112 PATENT DATE: 970828 WPI
ACCESSION NO.:
97-435164 (9740)
PRIORITY APPLIC. NO.: US 606143 APPLIC. DATE: 960223
NATIONAL APPLIC. NO.: WO 97US2291 APPLIC. DATE: 970218
LANGUAGE: English
ABSTRACT: A protein (A) consisting essentially of the N-terminal A and B
box (NAB) domain and NAB-S1 (the 1st transmembrane spanning domain)
linking region of the alpha subunit of Shaker-like potassium ion channel (SPC) which binds to a core region of the beta-subunit of SPC. Also claimed are a protein (B) comprising the core region of a beta-subunit of SPC which binds (A); an enriched or isolated nucleic acid (NA) encoding (A) or (B); a vector containing the NA; a host cell containing the vector; an expression system consisting of the NA and transcriptional or translational control elements for expression; an improved yeast 2-hybrid system comprising a 1st vector containing NA encoding a fusion protein of a DNA binding domain and (A), (B) or a putative (A) or (B) sequence and a 2nd vector containing NA encoding the fusion protein of a transactivation domain and a protein; and a method for modulating the flow of potassium ions through a cell membrane surrounding a cytoplasm, which involves introducing exogenous
Kv-beta2 protein or NA encoding it into the cell cytoplasm. (A), (B) or

the NA can be used in therapy of neurological, tumor, metabolic, cardiac and autoimmune diseases. (106pp)

11/3,AB/112 (Item 82 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0216020 DBA Accession No.: 97-11141 PATENT
New primate dendrokine a chemoattractant for hematopoietic cells - human recombinant dendrokine and fusion protein production, monoclonal antibody, and gene for use in autoimmune disease and tumor therapy and gene therapy
AUTHOR: Caux C; Lebecque S E; Banchereau J
CORPORATE SOURCE: Kenilworth, NJ, USA.
PATENT ASSIGNEE: Schering-USA 1997
PATENT NUMBER: WO 9729192 PATENT DATE: 970814 WPI
ACCESSION NO.:
97-415347 (9738)
PRIORITY APPLIC. NO.: US 600114 APPLIC. DATE: 960212
NATIONAL APPLIC. NO.: WO 97US1248 APPLIC. DATE: 970207
LANGUAGE: English
ABSTRACT: A pure primate dendrokine (I) is claimed (protein sequence disclosed). Also claimed are: a fusion protein of the primate dendrokine; a composition of the dendrokine and a suitable adjuvant; an antibody specific for (I), especially a labeled monoclonal antibody specific for human (I); nucleic acid (of disclosed DNA sequence) encoding (I) or a (I) fusion protein; an expression vector containing the DNA; a kit containing (I) or a (I) fragment, the antibody and the DNA encoding (I); a method for modulating the physiology or development of a cell, which involves contacting the cell with an agonist or antagonist of (I), where the antagonist is a (I)-specific antibody; modulating the atopy, autoimmunity, tissue rejection or undesired response to an antigen of a cell which involves contacting the cell with a (I)-agonist or (I)-antagonist; and the method for regulation of an infectious disease, a vaccine response or cancer in a cell. The DNA can be used in gene therapy and in transgenic animal construction. (62pp)

11/3,AB/113 (Item 83 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0215251 DBA Accession No.: 97-10372 PATENT
Fusion proteins containing non-viral cell membrane molecule - major histocompatibility complex or beta-2-microglobulin and antibody variable region or avidin fusion protein gene transfer, for use in gene therapy, or as a recombinant vaccine, etc.
AUTHOR: Chada S; Banks T; Moore M D; Chang S M W
CORPORATE SOURCE: Emeryville, CA, USA.
PATENT ASSIGNEE: Chiron-Viagene 1997
PATENT NUMBER: WO 9724446 PATENT DATE: 970710 WPI
ACCESSION NO.:
97-363681 (9733)
PRIORITY APPLIC. NO.: US 580541 APPLIC. DATE: 951229
NATIONAL APPLIC. NO.: WO 96US20295 APPLIC. DATE: 961220
LANGUAGE: English
ABSTRACT: A new fusion protein contains a non-virally-encoded cell membrane molecule (e.g. a major histocompatibility complex (MHC) class-I or -II protein or beta-2-microglobulin) and a targeting ligand (e.g. an antibody variable region, or a member of a high-affinity binding pair, e.g. avidin). A DNA sequence encoding the fusion protein may be inserted in a DNA cassette or vector for expression in a host cell. A new replication-defective retro virus vector has an MHC class-II molecule on its surface. A new packaging cell culture contains a gag/pol expression cassette and the new DNA cassette, optionally with a recombinant retro virus vector. The vector may be administered to a warm-blooded animal, for gene transfer to a selected cell type. The method is particularly useful for inhibition or destruction of a pathogenic agent in an animal host, e.g. in parasite, bacterium or virus infection, or to inhibit or destroy cancer or tumor cells. The method may also be used to generate an immune response against an immunogenic portion of an antigen, to prevent or treat disease, to suppress graft rejection, or suppress an immune or autoimmune response. (45pp)

11/3,AB/114 (Item 84 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0214692 DBA Accession No.: 97-09813 PATENT
Isolated protein homologs of viral inhibitors of apoptosis and related nucleic acid - baculo virus, mammal, nematode, yeast or insect apoptosis-inhibitor for use as an antitumor, virucide, immunosuppressive, etc., and use of DNA in gene therapy
AUTHOR: Vaux D L
CORPORATE SOURCE: Kew, Victoria, Australia.
PATENT ASSIGNEE: Amrad-Oper. 1997
PATENT NUMBER: WO 9723501 PATENT DATE: 970703 WPI
ACCESSION NO.:
97-350966 (9732)
PRIORITY APPLIC. NO.: AU 957275 APPLIC. DATE: 951222
NATIONAL APPLIC. NO.: WO 96AU827 APPLIC. DATE: 961220
LANGUAGE: English
ABSTRACT: A new cell-derived homolog of a viral inhibitor of apoptosis (IAP) is capable of inhibiting a cellular apoptotic response to virus infection. The original IAP is preferably from a baculo virus, and inhibits apoptosis mediated by an interleukin-1-beta-converting-enzyme (ICE, EC-3.4.22.36) protease or death domain-bearing FADD protein. The homolog is from an animal cell, e.g. from a mammal, nematode, yeast or insect, and has a preferred protein sequence, with homology to specified mouse, Drosophila sp., Caenorhabditis elegans or yeast sequences. DNA encoding the protein is also new. The protein may be used to promote or inhibit apoptosis in animal cells, for therapy (by inhibition) of degenerative or infectious disease (e.g. Alzheimer disease, motor neuron disease, apoplexy, myocardial infarction or AIDS) or (by promotion) of cancer or autoimmune disease. The DNA may be used in gene therapy of these diseases. (136pp)

11/3,AB/115 (Item 85 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0214315 DBA Accession No.: 97-09436 PATENT
New nucleic acid encoding chemokine receptors 88-2B and 88C - chemokine receptor DNA sequence; vector plasmid pBJ1 expression in COS-7 and 293 cell and antibody production from hybridoma cell culture for disease treatment and gene therapy
AUTHOR: Gray P W; Schweickart V L; Raport C J
CORPORATE SOURCE: Bothell, WA, USA.
PATENT ASSIGNEE: Icos 1997
PATENT NUMBER: WO 9722698 PATENT DATE: 970626 WPI
ACCESSION NO.:
97-341689 (9731)
PRIORITY APPLIC. NO.: US 661393 APPLIC. DATE: 960607
NATIONAL APPLIC. NO.: WO 96US20759 APPLIC. DATE: 961220
LANGUAGE: English
ABSTRACT: Isolated genomic or partially synthetic DNA or cDNA (I) encoding the 355 amino acid chemokine receptor 88-2B, the 352 amino acid receptor 88C (human) and the 352 amino acid receptor 88C of the macaque are new. Also claimed are: RNA transcribed from (I); vectors (e.g. plasmid pBJ1) containing (I); host cells (e.g. COS-7 and 293 cells) transformed or transfected with (I); purified and isolated 88-2B and 88C proteins; antibodies that bind to 88-2B or 88C; and hybridoma cell cultures (227K, M ,N, P or R) producing the antibodies. cDNA sequences of 1,915, 3,383 and 1,059 bp are specified together with protein sequences. Antisense forms of (I) are used to study/alter the genetics and expression of the receptor. The cells are used to produce receptor proteins (II) which are involved in leukocyte trafficking. (II) are potentially useful in the treatment of atherosclerosis, rheumatoid arthritis, tumors, asthma, viral infections (e.g. HIV virus and SIV virus) and other inflammatory conditions, pathological immune response and abnormal hematopoietic processes etc. as well as in gene therapy. (64pp)

11/3,AB/116 (Item 86 from file: 357)

DIALOG(R)File 357:Derwent Biotechnology Abs

0211393 DBA Accession No.: 97-06514 PATENT
Interleukin-10 with cyclosporin for immunosuppression therapy - gene therapy
AUTHOR: Tadmori W
CORPORATE SOURCE: Kenilworth, NC, USA.
PATENT ASSIGNEE: Schering 1997
PATENT NUMBER: WO 9705896 PATENT DATE: 970220 WPI
ACCESSION NO.:
97-154037 (9714)
PRIORITY APPLIC. NO.: US 619958 APPLIC. DATE: 960320
NATIONAL APPLIC. NO.: WO 96US12538 APPLIC. DATE: 960806
LANGUAGE: English
ABSTRACT: A new method for suppressing or preventing graft-versus-host disease (GVHD) involves administering an effective amount of human or virus interleukin-10 (IL-10) and cyclosporin to an individual at risk from or afflicted with GVHD. The method is suitable for transplant patients (heart, skin, kidney, pancreas, bone marrow and intestine transplant patients) and prevents graft rejection and is suitable for therapy of autoimmune disease (rheumatoid arthritis, lupus, diabetes, multiple sclerosis, myasthenia gravis, psoriasis, etc.). Also new is a pharmaceutical composition of IL-10 and cyclosporin. IL-10 can also be delivered by standard gene therapy techniques, including e.g. direct DNA injection into tissues, use of a recombinant virus vector or phospholipid, and implantation of transfected cells. Doses of IL-10 are 0.1-25 (1-16) ug/kg.day. Due to the activity of the IL-10, the cyclosporin-A can be used in lower doses (1-14 (1-8) mg/day), reducing the toxic effects of the cyclosporin-A. (25pp)

11/3,AB/117 (Item 87 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0210935 DBA Accession No.: 97-06056 PATENT
Inhibiting cell-mediated killing of mammalian target cells - pox virus serpin-protease-inhibitor gene cloning and adeno virus, adeno-associated virus, retro virus or herpes simplex virus expression; %%%autoimmune%%% disease, etc., %%%gene%%% %%%therapy%%%
AUTHOR: Bleackley R C; McFadden G; Moyer R W
CORPORATE SOURCE: Alberta, CA, USA; Gainesville, FL, USA.
PATENT ASSIGNEE: Univ.Alberta; Univ.Florida-Res.Found. 1997
PATENT NUMBER: WO 9710006 PATENT DATE: 970320 WPI
ACCESSION NO.:
97-202012 (9718)
PRIORITY APPLIC. NO.: US 3665 APPLIC. DATE: 950911
NATIONAL APPLIC. NO.: WO 96US14571 APPLIC. DATE: 960911
LANGUAGE: English
ABSTRACT: A new method for inhibiting cell-mediated killing of a mammalian target cell involves introducing into the target cell a nucleic acid consisting of a nucleic acid expressing a pox virus serpin-protease-inhibitor-1 (SPI-1) and optionally also SPI-2 and/or SPI-3 protein, which causes death of the target cell. Alternatively, nucleic acid encoding a therapeutic protein is administered to the cell. The pox virus is orthopox virus, cow-pox virus, rabbit-pox virus, small-pox virus or vaccinia virus. The SPI-1 or SPI-2 protein sequences are disclosed. Introduction of the nucleic acid to the target cell may be performed in vitro or in vivo. The target cell may be heterologous to the patient or autologous and may be administered to the patient after treatment. The nucleic acid may be contained in a liposome or an adeno virus, adeno-associated virus, retro virus or herpes simplex virus vector. The target cell is a human pancreas islet cell, bone marrow cell or CD4+ lymphocyte from a patient with HIV virus infection. The transformed target cell also containing a therapeutic gene and a method for determining whether a test nucleic acid encodes a SPI protein are also claimed. (28pp)

11/3,AB/118 (Item 88 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0210846 DBA Accession No.: 97-05967 PATENT
New bacterial delivery system for cells - Shigella flexneri attenuation by aspartate-semialdehyde-dehydrogenase gene mutation; vaccine generation and application in DNA and antigen transfer and gene therapy
AUTHOR: Branstrom A A; Sizemore D R; Sadoff J C
CORPORATE SOURCE: Frederick, MD, USA.
PATENT ASSIGNEE: U.S.Army 1997
PATENT NUMBER: WO 9708955 PATENT DATE: 970313 WPI
ACCESSION NO.:
97-192590 (9717)
PRIORITY APPLIC. NO.: US 18035 APPLIC. DATE: 960521
NATIONAL APPLIC. NO.: WO 96US14190 APPLIC. DATE: 960906
LANGUAGE: English
ABSTRACT: An attenuated Shigella flexneri 15D (ATCC 55710) (SF) is new which enters a cell (e.g. BHK cell) and dies once inside the cell. Also claimed are: a method for producing an attenuated SF by mutating an aspartate-b-semialdehyde-dehydrogenase (EC-1.2.1.11) gene; a vaccine for reducing disease symptoms in an individual caused by SF which contains an attenuated SF and an excipient; a DNA delivery vehicle containing an attenuated SF into which DNA is introduced; a delivery vehicle for antigen administration to a cell (intestinal mucosal epithelium) containing an attenuated SF into which the antigen is introduced; a method of delivering DNA or an antigen to a cell; a method for detecting SF infection; a diagnostic kit to detect infection; and a method for delivering functional DNA into cells using bacteria. This system may be used for DNA, antigen and functional molecule transfer to cells and for vaccine generation for infectious disease, cancer, transplant rejection and autoimmune disease therapy. The bacterial system may also be used for gene therapy. (56pp)

11/3,AB/119 (Item 89 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0210441 DBA Accession No.: 97-05562 PATENT
Inhibiting T-cells that recognize preselected target molecules - major histocompatibility complex component e.g. HLA and T-lymphocyte receptor or Fc receptor fusion protein for use as an immunosuppressive; %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Rosenberg A S
CORPORATE SOURCE: Bethesda, MD, USA.
PATENT ASSIGNEE: U.S.Dep.Health-Hum.Serv. 1997
PATENT NUMBER: WO 9708328 PATENT DATE: 970306 WPI
ACCESSION NO.:
97-179285 (9716)
PRIORITY APPLIC. NO.: US 2964 APPLIC. DATE: 950830
NATIONAL APPLIC. NO.: WO 952964 APPLIC. DATE: 950830
LANGUAGE: English
ABSTRACT: A new method for inhibition of a T-lymphocyte that specifically recognizes a preselected target molecule (e.g. a human major histocompatibility complex (MHC) component extracellular domain, such as HLA) involves contacting the T-lymphocyte with a natural killer cell or cytotoxic T-lymphocyte with a signal transduction molecule (e.g. a T-lymphocyte receptor zeta-chain, Fc receptor gamma-chain, Fc-epsilon receptor-1-beta, Epstein-Barr virus LMP2A, BLV gp30, TAM or ARAM) attached to the target. The signal transduction molecule may be expressed as a recombinant fusion protein with the MHC extracellular domain. DNA encoding the fusion protein is also new. Cells (e.g. bone marrow cells) transfected with the DNA under the control of a T-lymphocyte-specific promoter (e.g. a CD2, lck, CD3 or CD4 promoter) may be administered to induce immune tolerance to a target molecule (e.g. for %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%), so that the cells mature or differentiate in the thymus to mediate deletion or anergy of developing reactive T-lymphocytes. The fusion protein may also be used as an immunosuppressive. (157pp)

11/3,AB/120 (Item 90 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0210420 DBA Accession No.: 97-05541 PATENT
Regulation of cellular functions in vivo - cell surface signalling receptor

gene transfer to hepatocyte for signal transduction pathway activation; application in e.g. gluconeogenolysis regulation and gene therapy
AUTHOR: Gershengorn M C; Falck-Pedersen E S; Crystal R G
CORPORATE SOURCE: Ithaca, NY, USA.
PATENT ASSIGNEE: Cornell-Res.Found. 1997
PATENT NUMBER: WO 9707233 PATENT DATE: 970227 WPI
ACCESSION NO.:
97-165314 (9715)
PRIORITY APPLIC. NO.: US 2254 APPLIC. DATE: 950814
NATIONAL APPLIC. NO.: WO 96US13077 APPLIC. DATE: 960812
LANGUAGE: English
ABSTRACT: A recombinant in vivo cell (hepatocyte) is new and contains DNA
encoding a cell surface signalling receptor (CSR) not endogenous to the cells that is capable of activating a signal transduction pathway (STP) endogenous to the cell. The CSR can be controllably activated, thereby activating STP so as to regulate a cell function (e.g. gluconeogenolysis) controlled by the STP. The CSR is a sodium, potassium or chloride channel-linked, thyroliberin, enzyme-linked, steroid, thyroid, retinoid or calciferol receptor. The STP is an adenylate-cyclase (EC-4.6.1.1), guanylate-cyclase (EC-2.7.4.8), phosphoinositol turnover, protein-tyrosine-kinase (EC-2.7.1.112) or calcium ion pathway. The cell is transformed with DNA encoding a CSR using an adeno virus vector, herpes virus vector, liposome or by calcium phosphate precipitation. CSR is expressed in the cells, activating STP so as to regulate cell function. Such methods may also be used for obstructive pulmonary disease, asthma, hypoglycemia, diabetes and autoimmune disease therapy. (75pp)

11/3,AB/121 (Item 91 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0205745 DBA Accession No.: 97-00866 PATENT
Improving transfection of T cells by preliminary costimulation of proliferating cells - primary T-lymphocyte transfection method for HIV virus infection and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: June C H; Thompson C B; Kim S
CORPORATE SOURCE: Bethesda, MD, USA; Ann Arbor, MI, USA.
PATENT ASSIGNEE: U.S.Navy; Univ.Michigan 1996
PATENT NUMBER: WO 9634970 PATENT DATE: 961107 WPI
ACCESSION NO.:
96-506172 (9650)
PRIORITY APPLIC. NO.: US 475136 APPLIC. DATE: 950607
NATIONAL APPLIC. NO.: WO 96US6200 APPLIC. DATE: 960502
LANGUAGE: English
ABSTRACT: A method for improving primary T-lymphocyte transfection is new.
T-lymphocytes are transfecting by contacting proliferating cells with at least one costimulatory agent (I) then introducing DNA (II) containing the gene to be expressed in the proliferating, stimulated cells. Cells are contacted with an agent that stimulates proliferation and then with a mixture of a compound (Ia) that provides a primary activation signal and an agent (Ib) that provides a costimulatory signal. The treatment is for 1-24 hr (especially 10 hr) before the introduction of (II). (Ia) interacts with a T-lymphocyte cell receptor/CD3 complex (anti-CD3 antibody), with a CD2 molecule on the cells or is an antigen on an antigen-presenting cell. (Ib) is an anti-CD28 antibody, or stimulatory form of a natural ligand of CD28 (especially the B-lymphocyte antigens B7-1 or -2). Alternatively, (I) is a combination of a phorbol ester and calcium ionophore, a protein-tyrosine-kinase (EC-2.7.1.112) or a superantigen. (II) may encode a protein, an antisense RNA or ribozyme. Such a method may be used for HIV virus infection and %%%autoimmune%%% disease %%%gene%%%
%%%therapy%%%. (54pp)

11/3,AB/122 (Item 92 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0205649 DBA Accession No.: 97-00770 PATENT
Nucleotide sequence which inhibits interleukin-6 activity - interleukin-6-inhibitor DNA sequence harbored in a vector plasmid, for application in %%%autoimmune%%% and inflammatory disease %%%gene%%%
%%%therapy%%% by virus-mediated gene transfer
AUTHOR: Serlupi-Crescenzi O; Pezzotti A
CORPORATE SOURCE: Curacao, Netherlands Antilles.
PATENT ASSIGNEE: Appl.Res.Syst. 1996
PATENT NUMBER: WO 9635782 PATENT DATE: 961114 WPI
ACCESSION NO.:
96-518670 (9651)
PRIORITY APPLIC. NO.: EP 951778 APPLIC. DATE: 950511
NATIONAL APPLIC. NO.: WO 95EP1778 APPLIC. DATE: 950511
LANGUAGE: English
ABSTRACT: A specified DNA sequence (I) able to inhibit interleukin-6 (IL-6)
activity which comprises: at least one DNA sequence that is an APRE element of general formula ZXMYKGKAA (where Z = T or G is absent, X = T
or is absent, M = C or A, Y = C or T, and K + T or G; and at least one DNA sequence constituting a transcription factor binding site other than the APRE element. Also claimed are: a vector plasmid containing (I); use of (I) in therapy to inhibit the action of IL-6; a pharmaceutical composition containing (I) and at least 1 carrier and/or excipients; and a pharmaceutical composition comprising the above vector and at least 1 carrier and/or excipient. Preferably, the APRE element sequence us TTCTGGGAA, and is repeated at least twice, preferably 8 times.. This new approach involves blocking the intracellular proteins mediating the IL-6 signal. The DNA sequences can be used in virus-mediated gene therapy to inhibit the action of IL-6 in conditions where IL-6 plays a pathological role. The DNA sequence may be provided in a liposome formulation (for lipofection), or may be delivered by receptor-mediated DNA delivery. (35pp)

11/3,AB/123 (Item 93 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0205151 DBA Accession No.: 97-00272 PATENT
Hematopoietic stem cell transduced with recombinant retro viral particles - retro virus vector-mediated interleukin-2, interferon-gamma, colony stimulating factor, blood-clotting protein, or hormone gene transfer for gene therapy
AUTHOR: Jolly D J; Robbins J M; Kerr W G
CORPORATE SOURCE: Emeryville, CA, USA; Palo Alto, CA, USA.
PATENT ASSIGNEE: Chiron-Viagene; Systemix 1996
PATENT NUMBER: WO 9633281 PATENT DATE: 961024 WPI
ACCESSION NO.:
96-485786 (9648)
PRIORITY APPLIC. NO.: US 425762 APPLIC. DATE: 950420
NATIONAL APPLIC. NO.: WO 96US5432 APPLIC. DATE: 960419
LANGUAGE: English
ABSTRACT: A method of producing transduced hematopoietic stem, the method
consists of obtaining a population of hematopoietic stem cells from a patient and transducing the population of hematopoietic stem cells with recombinant retro virus particles substantially free from contamination with replication competent retro virus. The recombinant retro virus particles carry a vector construct encoding a gene of interest, preferably a cytokine and especially interleukin-2 or interferon-gamma, a colony stimulating factor, a blood-clotting protein, or a hormone. The hematopoietic stem cell is preferably a CD34+Thy-1+Lin-hematopoietic stem cell preferably transduced with a high titer preparation of recombinant retro virus particle. Also claimed are methods of treating a patient having a genetic disease, preferably cancer, an infectious disease, a degenerative disease, an inflammatory disease, a cardiovascular disease, or an autoimmune disease, involving transduction of a population of hematopoietic stem cells and reintroduction into the patient. (48pp)

11/3,AB/124 (Item 94 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0205029 DBA Accession No.: 97-00150 PATENT
Apopain, a new human apoptosis related enzyme - antisense DNA application in Alzheimer disease, Parkinson disease, cancer, aging, alopecia, cardiovascular, neurological injury, %%%autoimmune%%% disease, and AIDS

%%%gene%%% %%%therapy%%%
AUTHOR: Miller D K; Thornberry N A; Nicholson D W; Ali A; Vaillancourt
J P
CORPORATE SOURCE: Rahway, NJ, USA; Kirkland, Quebec, Canada.
PATENT ASSIGNEE: Merck-USA; Merck-Frosst-Canada 1996
PATENT NUMBER: WO 9633268 PATENT DATE: 961024 WPI
ACCESSION NO.:
96-485775 (9648)
PRIORITY APPLIC. NO.: US 426557 APPLIC. DATE: 950421
NATIONAL APPLIC. NO.: WO 96US5282 APPLIC. DATE: 960417
LANGUAGE: English
ABSTRACT: The following are claimed: 1) apopain, an apoptosis-related enzyme, of specified protein sequence; 2) a synthetic DNA molecule (I) encoding apopain, which is free of transcription termination sequences recognized by a recombinant host; 3) antibodies against apopain; 4) antisense DNA derived from (I); 5) a method for identifying compounds that modulate apopain; 6) compounds that modulate apopain identified by the above method; and 7) a method for treating an animal with altered apopain activity which involves either increasing or decreasing apopain activity or increasing or decreasing (I). Apopain is responsible for the proteolytic breakdown of poly(ADP-ribose) polymerase which occurs at the onset of apoptosis. DNA encoding apopain may be used for apopain production or in gene therapy, comprising in vivo or ex vivo gene transplantation, for enhancing the proinflammatory or pro-apoptotic effect of apopain. Anti-apopain antibodies and antisense DNA are used to reduce or eliminate the pro-inflammatory or pro-apoptotic effect of the enzyme. Modification of enzyme activity may be used in the therapy of immune, proliferative and degenerative diseases. (84pp)

11/3,AB/125 (Item 95 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 1999 Derwent Publ Ltd. All rts. reserv.

0203302 DBA Accession No.: 96-14073 PATENT
Identification and treatment of disorders - using recombinant Zap70-kinase, e.g. on a host cell surface, for antitumor or immunosuppressive drug screening; cancer or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Roifman C
CORPORATE SOURCE: Toronto, Ontario, Canada.
PATENT ASSIGNEE: HSC-Res.Develop. 1996
PATENT NUMBER: WO 9627797 PATENT DATE: 960912 WPI
ACCESSION NO.:
96-425531 (9642)
PRIORITY APPLIC. NO.: US 401548 APPLIC. DATE: 950308
NATIONAL APPLIC. NO.: WO 96IB320 APPLIC. DATE: 960307
LANGUAGE: English
ABSTRACT: A new method for identifying a quinazoline, tyrphostin, quinoxaline or natural agent of mol.wt. less than 3,000, capable of inhibiting transduction of a Zap70-kinase signal, involves exposing the agent to Zap70-kinase and detecting a change (activation or inhibition) in the signal transduction level or interaction between the kinase and a Zap70 binding partner. The Zap70-kinase may be expressed from a recombinant cell. The resulting agent may be used to treat a disorder characterized by an abnormality in the signal transduction pathway, e.g. autoimmune disease or cancer. The Zap70-kinase gene (as a gene replacement agent) or an antisense or ribozyme sequence against it may be expressed in vivo for gene therapy of a genetic condition (not claimed), using any suitable type of vector system, e.g. an adeno virus, retro virus or liposome system. (93pp)

11/3,AB/126 (Item 96 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 1999 Derwent Publ Ltd. All rts. reserv.

0202752 DBA Accession No.: 96-13523 PATENT
Redirecting cellular immune response by administration of cells able to express chimeric receptor - protein-tyrosine-kinase chimeric receptor expression in e.g. T-lymphocyte and adoptive immunotherapy for HIV virus infection, cancer and %%%autoimmune%%% disease %%%gene%%%
%%%therapy%%%
AUTHOR: Seed B; Romeo C; Kolanus W
CORPORATE SOURCE: Boston, MA, USA.
PATENT ASSIGNEE: Gen.Hosp.Boston 1996
PATENT NUMBER: WO 9626265 PATENT DATE: 960829 WPI
ACCESSION NO.:
96-402358 (9640)
PRIORITY APPLIC. NO.: US 394177 APPLIC. DATE: 950224
NATIONAL APPLIC. NO.: WO 96US1001 APPLIC. DATE: 960124
LANGUAGE: English
ABSTRACT: A method of directing a cellular immune response in a mammal is
claimed, which involves administering an effective amount of therapeutic cells, each of which expressing a membrane-bound proteinaceous chimeric receptor, consisting of an intracellular portion of a protein-tyrosine-kinase (PTK, EC-2.7.1.112), preferably Syk, which is capable of signalling the therapeutic cell to destroy a receptor-bound target cell or a receptor-bound target infective agent, and an extracellular portion which is capable of specifically recognizing and binding the target cell, or the target infective agent, preferably including amino acids 336-628 of human Syk or 338-630 of pig Syk. The therapeutic cells are preferably T-lymphocytes, natural killer cell, neutrophils, granulocytes, macrophages, mast cells, HeLa cells or embryonic stem cells, transformed by a vector (claimed) to express the chimeric receptor. The method induces a response against infected cells (especially those containing HIV virus), cancer cells and autoimmune-generated cells e.g. those associated with myasthenia gravis or lupus erythematotus. (93pp)

11/3,AB/127 (Item 97 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0202740 DBA Accession No.: 96-13511 PATENT
New hematopoietic restricted tyrosine-kinase DNA - recombinant protein-tyrosine-kinase production by expression in e.g. Escherichia coli, Bacillus subtilis, CHO and COS cell culture, for tumor, %%%autoimmune%%% disease and allergy %%%gene%%% %%%therapy%%%
AUTHOR: Witte O; Tsukada S; Saffran D; Rawlings D
CORPORATE SOURCE: Oakland, CA, USA.
PATENT ASSIGNEE: Univ.California 1996
PATENT NUMBER: US 550054 PATENT DATE: 960827 WPI
ACCESSION NO.: 96-401601
(9640)
PRIORITY APPLIC. NO.: US 391615 APPLIC. DATE: 950221
NATIONAL APPLIC. NO.: US 391615 APPLIC. DATE: 950221
LANGUAGE: English
ABSTRACT: The following are claimed: 1) purified cDNA encoding a
polypeptide selected from specified protein sequences; 2) a cell comprising DNA as in 1); and 3) purified cDNA selected from a specified DNA sequence. DNA encoding mouse TK is obtained from a cDNA library
prepared using mouse B-lymphoid progenitor cells. The mouse cDNA is then used to obtain DNA encoding a human TK homolog. The DNA can be
used for the production of a hematopoietic restricted protein-tyrosine-kinase (TK, EC-2.7.1.112). The products can be used for obtaining compositions which modulate the expression and/or function of the TK and for studying activating pathways associated with the TK. Modulation of the activity of the TK can be used for prophylactic and therapeutic purposes, in cases of gene therapy, therapy of tumor cells dependent on the functioning of the TK, treatment of non-tumor hyperproliferative states, e.g. associated with autoimmune diseases and allergy, and identification of cell type based on the nature and amount of the TK. The TK can also be used for the production of antibodies and in assays. (26pp)

11/3,AB/128 (Item 98 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0202128 DBA Accession No.: 96-12899 PATENT
Transformation of eukaryotic cells, particularly in vivo - eukaryote cell transformation with e.g. beta-galactosidase gene antisense DNA and pig-derived submucosa tissue for e.g. degenerative joint disease gene therapy
AUTHOR: Bonadio J; Badylak S F; Voytik S
CORPORATE SOURCE: West Lafayette, IN, USA.

PATENT ASSIGNEE: Purdue-Res.Found.; Bonadio J 1996
PATENT NUMBER: WO 9625179 PATENT DATE: 960822 WPI
ACCESSION NO.:
96-393141 (9639)
PRIORITY APPLIC. NO.: US 390700 APPLIC. DATE: 950217
NATIONAL APPLIC. NO.: WO 96US2136 APPLIC. DATE: 960216
LANGUAGE: English
ABSTRACT: A method for inducing the production of eukaryotic cells containing exogenous nucleic acid (antisense) sequences is new and involves contacting target cells with a transformation composition containing submucosal tissue of a warm-blood vertebrate (e.g. pig) in a fluidized form and an exogenous nucleic acid sequence, under conditions conducive to target cell proliferation. Also claimed are: a composition containing a suspension of comminuted intestinal tissue (tunica submucosa delaminated from both the tunica muscularis and the luminal portion of the tunica mucosa in a aq. medium) of a warm-blooded vertebrate and a nucleic acid; and an injectable non-immunogenic tissue graft containing comminuted or solubilized submucosal tissue in combination with a DNA sequence containing a gene for bifunctional protein. This method may be used for e.g. degenerative joint disease, soft tissue injury, bone fracture, soft tissue ulceration or autoimmune disease therapy. (25pp)

11/3,AB/129 (Item 99 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0202000 DBA Accession No.: 96-12771 PATENT
New nucleic acid encoding human chemokines beta-11 and alpha-1 - human recombinant chemokine Ck-beta-11 and Ck-alpha-1 preparation, gene transfer and antisense oligonucleotide for e.g. leukemia, tumor and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Li H
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: Hum.Genome-Sci. 1996
PATENT NUMBER: WO 9624668 PATENT DATE: 960815 WPI
ACCESSION NO.:
96-384440 (9638)
PRIORITY APPLIC. NO.: WO 95US01780 APPLIC. DATE: 950208
NATIONAL APPLIC. NO.: WO 95US1780 APPLIC. DATE: 950208
LANGUAGE: English
ABSTRACT: A nucleic acid molecule (DNA, RNA or genomic DNA) is claimed,
which encodes a 98 or 109 amino acid protein (sequence specified), or a protein encoded by the cDNA deposited as ATCC 75948 and 75947, or their
fragments, analogs or derivatives, where the protein is preferably a chemokine. Also claimed are: (a) vectors containing the DNA; (b) host cells containing the vectors; (c) a process for producing the protein, which involves expressing the protein encoded by the DNA; (d) a process for producing cells capable of expressing the protein, which involves genetically engineering the cells with the vector; (e) isolated DNA that hybridizes to the nucleic acid and encodes a protein with chemokine-beta-11 or -alpha-1 activity; (f) the protein encoded by the nucleic acid; (g) antibodies against the protein; and (f) antagonists, such as antisense oligonucleotides. The protein may be used therapeutically to treat e.g. leukemia, solid tumors, chronic infections, autoimmune disease, fibrotic disorders and psoriasis, while antagonists may be used to treat e.g. rheumatoid arthritis and the DNA may be used for gene therapy. (66pp)

11/3,AB/130 (Item 100 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0201479 DBA Accession No.: 96-12250 PATENT
DNA encoding chimeric proliferation receptors - signal peptide, extracellular inducer-responsive clustering domain, transmembrane domain, proliferation signalling domain-containing chimeric DNA for e.g. cancer therapy
AUTHOR: Capon D J; Tian H; Smith D H; Winslow G A; Siekevitz M
CORPORATE SOURCE: Foster City, CA, USA.
PATENT ASSIGNEE: Cell-GeneSys 1996
PATENT NUMBER: WO 9623881 PATENT DATE: 960808 WPI
ACCESSION NO.:
96-371430 (9637)
PRIORITY APPLIC. NO.: US 382846 APPLIC. DATE: 950202
NATIONAL APPLIC. NO.: WO 96US1292 APPLIC. DATE: 960202
LANGUAGE: English
ABSTRACT: A novel chimeric DNA (I) sequence encoding a membrane bound
protein (MBP) is new and contains in frame DNA encoding: a signal peptide; an extracellular inducer-responsive clustering domain that binds at least one inducer molecule which results in the dimerization or oligomerization of the extracellular domain; a transmembrane domain; and a proliferation signalling domain from a protein which signals the cell to proliferate. Also claimed are: a chimeric DNA sequence encoding a MBP and a DNA sequence encoding a cytoplasmic effector function signal domain which encodes a protein that transduces an effector function signal in a host cell (human); a sequence encoding an intracellular proliferation receptor protein (IPRP); a sequence encoding an IPRP and a cytoplasmic effector function signalling domain; a sequence encoding a hybrid inducer binding proliferation receptor protein; an expression DNA cassette containing a transcription initiation region, a DNA sequence and a termination signal; and chimeric proteins. Such constructs may be used for cancer, virus infection and autoimmune disease therapy. (139pp)

11/3,AB/131 (Item 101 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0200964 DBA Accession No.: 96-11735 PATENT
Human Fas gene promoter region - and adeno virus or retro virus vector construction for %%%autoimmune%%% disease or cancer %%%gene%%%
%%%therapy%%%, transgenic animal construction or drug screening
AUTHOR: Mountz J D; Liu C; Cheng J; Koopman W J; Zhou T
CORPORATE SOURCE: Birmingham, AL, USA.
PATENT ASSIGNEE: UAB-Res.Found. 1996
PATENT NUMBER: WO 9622370 PATENT DATE: 960725 WPI
ACCESSION NO.:
96-354527 (9635)
PRIORITY APPLIC. NO.: US 377522 APPLIC. DATE: 950120
NATIONAL APPLIC. NO.: WO 96US606 APPLIC. DATE: 960119
LANGUAGE: English
ABSTRACT: A new DNA sequence contains a Fas gene 5'-promoter region, free
of structural genes, a c-myb transcription factor binding region and a specified control element. The new sequence may be operatively linked to an expressible DNA coding region, e.g. Fas cDNA, optionally with a heterologous promoter, or a growth factor, growth factor receptor, cytokine, nuclear regulatory factor, tumor suppressor, antitumor agent, peptide hormone or reporter gene, encoding e.g. transforming growth factor-alpha or -beta, epidermal growth factor, fibroblast growth factor, tumor necrosis factor, p53, c-myc, c-fos, granulocyte or granulocyte-macrophage colony stimulating factor, an enzyme catalyzing prodrug activation, beta-galactosidase (EC-3.2.1.23) or chloramphenicol-acetyltransferase (EC-2.3.1.28). The DNA may be inserted in an adeno virus or retro virus vector for expression in a host cell, optionally regulated by an AP-1, CP2, GF-1, NF-Y, c-myb or EBP20 transcription factor. The DNA and vector may be used in transgenic animal construction, drug screening and in gene therapy of Fas-mediated apoptosis, e.g. in autoimmune disease or cancer. (123pp)

11/3,AB/132 (Item 102 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0200929 DBA Accession No.: 96-11700
Isolation of a nuclease-resistant decoy RNA that selectively blocks autoantibody binding to insulin receptors on human lymphocytes - for application in %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Lee S W; +Sullenger B A
CORPORATE AFFILIATE: Univ.Duke
CORPORATE SOURCE: Department of Experimental Surgery and Genetics, Box
2601, Duke University Medical Center, Durham, NC 27710, USA.
JOURNAL: J.Exp.Med. (184, 2, 315-24) 1996
ISSN: 0022-1007 CODEN: JEMEAV
LANGUAGE: English

ABSTRACT: Isolation of a nuclease-resistant RNA decoy that specifically binds the mouse MA20 monoclonal antibody and cross-reacts with autoantibodies from patients with severe insulin-resistance is reported. An RNA library of 10(14) different molecules was generated with every pyrimidine modified at it's 2' position by an amino group. The amino-derivatized RNA library was preincubated with normal mouse IgGs and RNA-antibody complexes were immunoprecipitated and removed.
The precleared amino-RNA pool was then incubated with MA20, and RNA-antibody complexes were immunoprecipitated. Bound RNAs were eluted
and reverse transcribed. The resulting cDNAs were amplified and transcribed to generate RNA for the next cycle of selection. After 12 rounds of selection, the amplified cDNAs were cloned and 18 different clones were sequenced. A specific 2'-amino-derivatized RNA was found to be at least 10,000-fold more stable than unmodified RNA in serum, and acted as a decoy and blocked MA20 to it's natural antigen (human insulin receptor) on lymphocytes. The results suggest that RNA decoys may be useful reagents to inhibit autoimmune diseases. (36 ref)

11/3,AB/133 (Item 103 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0200267 DBA Accession No.: 96-11038 PATENT
New CD40 associated protein, agonists and antagonists - used to modulate cell proliferation, immune response, apoptosis, etc., e.g. for treating cancer or %%%autoimmune%%% disease and %%%gene%%% %%%therapy%%%
AUTHOR: Reed J C; Sato T
CORPORATE SOURCE: La Jolla, CA, USA.
PATENT ASSIGNEE: La-Jolla-Cancer-Res.Found. 1996
PATENT NUMBER: WO 9616665 PATENT DATE: 960606 WPI
ACCESSION NO.:
96-286818 (9629)
PRIORITY APPLIC. NO.: US 349357 APPLIC. DATE: 941202
NATIONAL APPLIC. NO.: WO 95US15695 APPLIC. DATE: 951204
LANGUAGE: English
ABSTRACT: Pure mammalian CD40-associated protein (I) and its active
fragments are new. Also new are: i. reagents (A) that bind specifically to (I); ii. nucleic acid (II) encoding (I); iii. vectors containing (II); iv. host cells containing such vectors; v. fragments of at least 10 nucleotides that hybridize under relatively stringent conditions with (II); vi. a method for identifying compounds (B) that alter association of (I) with a 2nd molecule (C); vii. method for identifying agonists and antagonists that respectively increase or decrease the level of (I) expression in a cell. (B) are used to modulate cell functions, e.g. Ig class switching, proliferation and apoptosis, so can be used to treat cancer, autoimmune diseases, immunodeficiency diseases, and neurodegeneration. (A), especially antibodies, can be used to assay (I), particularly to detect pathologically altered levels, while (II) can be used to identify related genes and to express (I) for gene therapy. (94pp)

11/3,AB/134 (Item 104 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0199144 DBA Accession No.: 96-10499 PATENT
DNA encoding polypeptides eliciting programmed mammalian cell death - RP-2
and RP-8 gene for detecting programmed cell death in cells and for use as a DNA probe for diagnosis of human disease e.g. cancer and %%%autoimmune%%% disease; potential %%%gene%%% %%%therapy%%%
AUTHOR: Owens G P; Cohen J J; Hahn W E
CORPORATE SOURCE: Boulder, CO, USA.
PATENT ASSIGNEE: Univ.Colorado 1996
PATENT NUMBER: US 5527682 PATENT DATE: 960618 WPI
ACCESSION NO.:
96-299855 (9630)
PRIORITY APPLIC. NO.: US 325743 APPLIC. DATE: 941019
NATIONAL APPLIC. NO.: US 325743 APPLIC. DATE: 941019
LANGUAGE: English
ABSTRACT: A purified and isolated DNA sequence (I) and its fragments and
derivatives encoding a protein (II) eliciting programmed mammal cell death is claimed. Also claimed are: prokaryotic or eukaryotic cells transformed or transfected with (I) under the control of a heterologous regulatory control sequence in an expression vector; and a method for detecting the RP-8 gene or RP-2 gene encoding (II), which involves hybridizing mRNA extracted from a tissue or an organ sample (thymus, thymocytes, brain, liver or olfactory epithelium) with a probe specific for the gene and determining the ability of the probe to hybridize to the mRNA. RP-8 and RP-2 genes are useful in therapy and diagnosis of human diseases, e.g. cancer and to eliminate immune cells linked to autoimmune diseases. The 2 genes are also useful to monitor the extent of cell death associated with specific diseases. (23pp)

11/3,AB/135 (Item 105 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0198627 DBA Accession No.: 96-09398 PATENT
Novel transcription factor E2F-4, and polynucleotides encoding it - production by vector, encoding antisense DNA sequence, expression in host cell, and corresponding monoclonal antibody, for cancer, virus infection, and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Bernards R; Beijersbergen R L
CORPORATE SOURCE: Amsterdam, The Netherlands.
PATENT ASSIGNEE: Prolifix; Netherlands-Cancer-Inst. 1996
PATENT NUMBER: WO 9615243 PATENT DATE: 960523 WPI
ACCESSION NO.:
96-268218 (9627)
PRIORITY APPLIC. NO.: GB 9423049 APPLIC. DATE: 941115
NATIONAL APPLIC. NO.: WO 95US868 APPLIC. DATE: 950418
LANGUAGE: English
ABSTRACT: The following are claimed: (1) a polypeptide (PP) which comprises
transcription factor E2F-4; (2) a polynucleotide comprising a 1489 base specified DNA sequence (DS), a complementary DS to the 1489 base DS, a
DS which selectively hybridizes to any of the above 2 DS's, a DS encoding the PP, or a fragment of any of the above DS's; (3) a ds DNA of (2) and it's complementary sequence; (4) a vector containing the DNA of (2) or (3); (5) a host cell containing the vector; (6) a monoclonal antibody (MAb), fragment or mutant which binds to the PP; (7) a hybridoma cell line producing the above MAb; and (8) a screening method to identify chemotherapeutic agents for the treatment of proliferative or viral disease. The vector and DNA are used in gene therapy to treat uncontrolled proliferation of cells, e.g. cancer, virus infection, self-proliferation and autoimmune diseases. The vector preferably expresses either an antisense DNA to inhibit translation of E2F-4 mRNA, or the PP which interferes with the binding of E2F-4 to a DP protein or related PP. (97pp)

11/3,AB/136 (Item 106 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0198486 DBA Accession No.: 96-09257 PATENT
New human serine protein-kinase p65 and related nucleic acid - antisense DNA for use in gene therapy, DNA probe and DNA primer and cell expressing recombinant protein for use in drug testing
AUTHOR: Abo A; Martin G A
CORPORATE SOURCE: Richmond, CA, USA.
PATENT ASSIGNEE: Onyx-Pharm. 1996
PATENT NUMBER: US 5518911 PATENT DATE: 960521 WPI
ACCESSION NO.:
96-259065 (9626)
PRIORITY APPLIC. NO.: US 369780 APPLIC. DATE: 950106
NATIONAL APPLIC. NO.: US 369780 APPLIC. DATE: 950106
LANGUAGE: English
ABSTRACT: A purified and isolated DNA sequence encoding human p21-protein
activated serine-kinase p65 protein (hPAK65) is claimed, where the DNA sequence has 95% homology with a disclosed hPAK65 encoding sequence and
hybridizes under high stringency with a hPAK65 nucleic acid sequence or its complementary sequence. The protein sequence encoded by the DNA

sequence is disclosed. Also claimed are: a vector containing the DNA; a host cell transformed with the hPAK65 DNA, operatively associated with an expression control sequence capable of directing expression of an hPAK65 sequence; a host cell comprising a hPAK65 sequence and expressing hPAK65 having serine-kinase activity; and a method for producing hPAK65m which involves culturing a transformed host cell in a suitable culture medium and recovering the product from the culture broth. The transformed cells are able to express hAK65 constitutively and are useful for screening compounds affecting hAK65 activity, e.g. for use in cancer, lymphoproliferationm arthritis, angiogenesis, inflammation, autoimmune disease or apoptosis therapy. The DNA can be used in antisense gene therapy and as a DNA probe or DNA primer. (42pp)

11/3,AB/137 (Item 107 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0196811 DBA Accession No.: 96-08191 PATENT
Recombinant retro virus carrying a vector construct expressing a palliative - potential cancer, HIV virus disease or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
CORPORATE SOURCE: USA.
PATENT ASSIGNEE: Viagene 1996
PATENT NUMBER: EP 702084 PATENT DATE: 960320 WPI
ACCESSION NO.: 96-152700
(9616)
PRIORITY APPLIC. NO.: US 170515 APPLIC. DATE: 880321
NATIONAL APPLIC. NO.: EP 89115441 APPLIC. DATE: 890321
LANGUAGE: English
ABSTRACT: A recombinant retro virus carrying a vector construct is claimed.
The retro virus can prevent, inhibit, stabilize or reverse infectious, cancerous or autoimmune diseases by directing expression of a palliative in cells infected with the retro virus. The palliative inhibits the function of a pathogenic agent required for pathogenicity. The retro virus is useful for stimulating a specific immune response, either humoral or cell-mediated, to an antigen or pathogenic antigen, inhibiting the function of a pathogenic agent, particularly HIV virus, or inhibiting the interaction of a pathogenic agent with a host cell receptor. The retro virus vector is useful for inhibiting cancer, virus infections or immunological abnormalities. (44pp)

11/3,AB/138 (Item 108 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0196195 DBA Accession No.: 96-06966 PATENT
Inhibition of cell proliferation and lymphocyte activation - with HIV virus-1 vpr protein or vpr-encoding nucleic acid for application in hyperproliferative disease, autoimmune disease and transplant rejection gene therapy
AUTHOR: Weiner D B; Levy D N; Refaeli Y; Williams W V; Ayyaroo V
CORPORATE SOURCE: Philadelphia, PA, USA; Malvern, PA, USA.
PATENT ASSIGNEE: Univ.Pennsylvania; Apollon 1996
PATENT NUMBER: WO 9608970 PATENT DATE: 960328 WPI
ACCESSION NO.:
96-188141 (9619)
PRIORITY APPLIC. NO.: US 309644 APPLIC. DATE: 940921
NATIONAL APPLIC. NO.: WO 95US12344 APPLIC. DATE: 950921
LANGUAGE: English
ABSTRACT: Methods for (a) inhibiting proliferation of cells, and (b) preventing activation of lymphocyte cells comprises contacting the cells with HIV virus-1 vpr protein (I) or transforming the cells with a (I)-encoding nucleic acid molecule. Also claimed are conjugates comprising (I) or a rip-1-binding fragment of (I) covalently linked to a drug, toxin, nucleic acid molecule or radioisotope. In a preferred method, the cells are (a) differentiated or undifferentiated and (b) T-lymphocytes, B-lymphocytes or monocytes. The conjugates preferably comprise (I) linked to a nucleic acid (especially DNA) molecule. The methods may be used for the treatment of hyperproliferative diseases, autoimmune diseases and patients with transplanted organs or tissues (claimed). The conjugates may be used to deliver active agents to the nuclei of cells in vitro and in vivo. (66pp)

11/3,AB/139 (Item 109 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0195011 DBA Accession No.: 96-05782 PATENT
Isolated chemokine polypeptides and polynucleotides encoding them - recombinant Ck-beta-4 and Ck-beta-10 protein preparation and gene transfer for e.g. tumor, chronic infection and %%%autoimmune%%% disease
%%%gene%%% %%%therapy%%%
AUTHOR: Li H; Adams M D
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: Hum.Genome-Sci. 1996
PATENT NUMBER: WO 9605856 PATENT DATE: 960229 WPI
ACCESSION NO.:
96-151145 (9615)
PRIORITY APPLIC. NO.: WO 94US09484 APPLIC. DATE: 940823
NATIONAL APPLIC. NO.: WO 94US9484 APPLIC. DATE: 940823
LANGUAGE: English
ABSTRACT: Isolated nucleic acid is claimed, selected from nucleic encoding:
(a) Ck-beta-4 or Ck-beta-10 protein (DNA and protein sequences specified), or fragments, analogs or derivatives thereof; and (b) Ck-beta-4 or Ck-beta-10 protein having a sequence encoded by cDNA deposited as ATCC 75848 or ATCC 75849, respectively, or fragments, analogs or derivatives thereof. Also claimed are: (i) a vector containing the DNA; (ii) a host cell genetically engineered with the vector; (iii) production of the protein involving expression of the DNA in a host cell; (iv) isolated DNA which hybridizes with the above DNA; (v) Ck-beta-4 or Ck-beta-10 protein; (vi) antibodies against the protein; (vii) antagonists against the protein; (viii) a method for the treatment of a patient requiring Ck-beta-4 or Ck-beta-10 by administering the protein; (ix) a method for the treatment of a patient in need of inhibiting the proteins by administering the antagonist; (x) a method for the treatment of a patient in vivo by gene transfer. They are useful in the treatment of e.g. solid tumors, chronic infections, autoimmune diseases, psoriasis, asthma and allergy. (53pp)

11/3,AB/140 (Item 110 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0190786 DBA Accession No.: 96-01557 PATENT
Polynucleotide encoding interleukin-6 splice variant - useful for %%%autoimmune%%% disease and inflammation %%%gene%%% %%%therapy%%%
AUTHOR: Ruben S; Li H; Adams M D
CORPORATE SOURCE: Rockville, MD, USA.
PATENT ASSIGNEE: Hum.Genome-Sci. 1995
PATENT NUMBER: WO 9532282 PATENT DATE: 951130 WPI
ACCESSION NO.:
96-020577 (9602)
PRIORITY APPLIC. NO.: US 246427 APPLIC. DATE: 940519
NATIONAL APPLIC. NO.: WO 95US6094 APPLIC. DATE: 950517
LANGUAGE: English
ABSTRACT: An isolated polynucleotide (I) of disclosed genomic DNA sequence
or RNA sequence (or having at least 70% homology with and capable of hybridizing with this sequence) and its fragments are claimed. (I) encodes an interleukin-6 splice variant (II) based on the disclosed protein sequence expressed by ATCC 75697 and is especially the insert of ATCC 75697. Also claimed are: a vector (retro virus) containing (I); a host cell genetically engineered with the vector; a method for producing recombinant (II) involving culturing a (I)-containing host cell; a method for producing cells capable of expressing (II) involving genetically engineering cells with the new vector; analogs and derivatives of (II); recombinant (II); a compound inhibiting (II); a method for therapy of a patient in need of (II) involving administering recombinant (II); gene therapy of a patient involving administering (I) in vivo; therapy using the (II)-inhibitor; and diagnosis of a disease or disease susceptibility related to underexpression of (II) involving determining a mutation in (I); screening for (II)-inhibitors. (II) may be used in inflammation, keratitis, ulcer, etc., therapy. (54pp)

11/3,AB/141 (Item 111 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

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0190760 DBA Accession No.: 96-01531 PATENT
Promoter regions of the human p75 tumor necrosis factor receptor gene - and related transcription inhibitory region and sequence motifs, useful for inhibiting effects of tumor necrosis factor
AUTHOR: Weinwurzel H
CORPORATE SOURCE: Rehevot, Israel
PATENT ASSIGNEE: Yeda-Res.Develop. 1995
PATENT NUMBER: WO 9531206 PATENT DATE: 951123 WPI
ACCESSION NO.:
96-010683 (9601)
PRIORITY APPLIC. NO.: IL 109633 APPLIC. DATE: 940511
NATIONAL APPLIC. NO.: WO 95US5853 APPLIC. DATE: 950511
LANGUAGE: English
ABSTRACT: Promoter sequences (P) of the human p75 tumor necrosis factor receptor (TNF-R) gene are new. Also new are: i. fragments (F) of (P) containing a transcription inhibiting region (TIR); ii. sequence motifs (SM) within (P) or (F); iii. motif regions (MR) containing at least 1 SM plus sequences flanking it and/or connecting it to at least 1 other SM; iv. genes cloned using SM or MR as probes; v. protein (I) encoded by a sequence within the p75 TNF-R gene beginning with the 1st intron in its 3' region and expressed under control of a (P) located in the first intron. Pharmaceutical compositions may be (1) a viral vector containing a gene encoding a ligand for a cell surface receptor, and a sequence encoding MR or SM, (2) an oligonucleotide encoding the SM (for topical application) or (3) a ribozyme specific for mRN encoding the new factors, motifs or proteins. SM and MR can be used as probes to screen a human genomic or cDNA library to isolate factors that bind to them. Inhibition/induction of such factors should allow modulation of TNF-R production and thus of TNF binding, and be used in septic shock, graft vs. host reactions, rheumatic and other autoimmune diseases. (48pp)

11/3,AB/142 (Item 112 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0189493 DBA Accession No.: 96-00264 PATENT
New DNA encoding interleukin-1-beta-converting-enzyme - use of gene or antisense DNA in gene therapy, and recombinant protease or DNA probe as a diagnostic agent
AUTHOR: Nicholson D W; Ali A; Munday N A; Vaillancourt J P
CORPORATE SOURCE: Kirkland, Quebec, Canada.
PATENT ASSIGNEE: Merck-Frosst-Canada 1995
PATENT NUMBER: WO 9527793 PATENT DATE: 951019 WPI
ACCESSION NO.:
95-366396 (9547)
PRIORITY APPLIC. NO.: US 225487 APPLIC. DATE: 940408
NATIONAL APPLIC. NO.: WO 95CA188 APPLIC. DATE: 950404
LANGUAGE: English
ABSTRACT: A new DNA sequence encodes an interleukin-1-beta-converting-enzym
e-related cysteine protease-III (EC-3.4.22.36) precursor or a derivative. The following are also new: RNA encoded by the DNA; an expression vector containing the DNA; a recombinant host cell containing the vector; a process for production of recombinant protease by culturing the recombinant host and recovering the product; a method of identifying compounds modulating activity of the protease by mixing test compounds with the enzyme and comparing to a standard; a kit containing the new DNA, the protease, specific antibodies to the protease and/or homologs of the protease; an antibody to the protease; therapeutic antisense DNA complementary to the new DNA; and a method for altering activity of the protease by gene therapy involving in vivo or ex vivo introduction of the DNA. Alzheimer disease, Parkinson disease, cancer, aging, alopecia, cardiovascular or neurological injury, pathogenic infection, autoimmune disease or immunodeficiency may be treated. An oligonucleotide DNA probe or RNA probe may be used to identify related sequences or as a diagnostic agent. (45pp)

11/3,AB/143 (Item 113 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0189492 DBA Accession No.: 96-00263 PATENT
DNA encoding a new interleukin-1-beta-converting-enzyme - use of gene or antisense DNA in gene therapy, and recombinant protease or DNA probe as a diagnostic agent
AUTHOR: Nicholson D W; Ali A; Munday N A; Vaillancourt J P
CORPORATE SOURCE: Kirkland, Quebec, Canada.
PATENT ASSIGNEE: Merck-Frosst-Canada 1995
PATENT NUMBER: WO 9527792 PATENT DATE: 951019 WPI
ACCESSION NO.:
95-366395 (9547)
PRIORITY APPLIC. NO.: US 224930 APPLIC. DATE: 940408
NATIONAL APPLIC. NO.: WO 95CA187 APPLIC. DATE: 950404
LANGUAGE: English
ABSTRACT: A new DNA sequence encodes an interleukin-1-beta-converting-enzym
e-related cysteine protease-III (EC-3.4.22.36) or a derivative. The following are also new: RNA encoded by the DNA; an expression vector containing the DNA; a recombinant host cell containing the vector; a process for production of recombinant protease by culturing the recombinant host and recovering the product; a method of identifying compounds modulating activity of the protease by mixing test compounds with the enzyme and comparing to a standard; a kit containing the new DNA, the protease, specific antibodies to the protease and/or homologs of the protease; an antibody to the protease; therapeutic antisense DNA complementary to the new DNA; and a method for altering activity of the protease by gene therapy involving in vivo or ex vivo introduction of the DNA. Alzheimer disease, Parkinson disease, cancer, aging, alopecia, cardiovascular or neurological injury, pathogenic infection, autoimmune disease or immunodeficiency may be treated. An oligonucleotide DNA probe or RNA probe may be used to identify related sequences or as a diagnostic agent. (43pp)

11/3,AB/144 (Item 114 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0186436 DBA Accession No.: 95-13257 PATENT
Inducing and maintaining tolerance to epitopes or antigens containing them - by transforming hematopoietic or lymphoid cells with retro virus vector encoding a fusion immunoglobulin; application in autoimmune disease and allergic disease gene therapy and diagnosis
AUTHOR: Scott D W; Zambidis E T
PATENT ASSIGNEE: Univ.Rochester 1995
PATENT NUMBER: WO 9521926 PATENT DATE: 950817 WPI
ACCESSION NO.:
95-293127 (9538)
PRIORITY APPLIC. NO.: US 195874 APPLIC. DATE: 940214
NATIONAL APPLIC. NO.: WO 95US1671 APPLIC. DATE: 950210
LANGUAGE: English
ABSTRACT: An expression vector is claimed, for maintaining expression of a tolerogenic epitope in an animal, which contains (a) DNA encoding a fusion immunoglobulin (I) operably linked to control regions functional in hematopoietic or lymphoid cells, where (I) has 1 or more heterologous tolerogenic epitopes at the N-terminal variable region, operably linked to, (b) a vector that can provide for stable maintenance of the DNA in the cell. Also claimed are: i. tolerizing an animal to an epitope by stably transforming a population of hematopoietic or lymphoid cells from the animal with the vector and introducing the transformed population into an animal and/or administering (I) to the animal; ii. a plasmid (ATCC 69555); and iii. a pharmaceutical composition containing a tolerogenic amount of a fusion Ig, and an acceptable excipient. More specifically, the fusion IgG includes an epitope having the amino acid sequence of amino acids 12-26 of the phage lambda CI repressor protein. The vector is especially a retro virus vector and the transformed cell is a bone marrow cell. The methods are useful in the diagnosis and treatment of autoimmune or allergic immune responses. (62pp)

11/3,AB/145 (Item 115 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0185804 DBA Accession No.: 95-12625 PATENT
New DNA encoding chimeric protein of CD4 and src protein-kinase - recombinant fusion protein production and encoding DNA application in tumor, %%%autoimmune%%% disease, etc., %%%gene%%% %%%therapy%%%
AUTHOR: Littman D; Xu H
PATENT ASSIGNEE: Univ.California 1995
PATENT NUMBER: US 5439819 PATENT DATE: 950808 WPI ACCESSION NO.:
95-283098 (9537)
PRIORITY APPLIC. NO.: US 112912 APPLIC. DATE: 930827
NATIONAL APPLIC. NO.: US 112912 APPLIC. DATE: 930827
LANGUAGE: English
ABSTRACT: A DNA molecule comprising a nucleic acid sequence encoding a fusion protein of CD4 lacking the CD4 cytoplasmic domain and an src protein-tyrosine-kinase (EC-2.7.1.112) is claimed. The src protein-tyrosine-kinase is preferably human and is p56lck, c-SRC, Fyn-T, ZAP-70 or Hck. The DNA molecule preferably also contains a promoter operably linked to the nucleic acid sequence encoding the CD4 molecule. Also claimed is a cell transfected with the claimed DNA molecule, where the cell is a T-lymphocyte. The fusion protein amplifies by at least 30-fold the signal produced by T-lymphocyte stimulation and can be used to identify compounds that block CD4 positive T-lymphocyte activation and self antigens that mediate autoimmune disease. The DNA can be used in gene therapy to increase the immune response to a specific antigen, e.g. in the cases of infections and tumors, especially those associated with a low level of protein-tyrosine-kinase. Similar constructs based on CD8 instead of CD4 can be used to screen for major histocompatibility complex class I restricted antigens and the corresponding DNA can be used in the same way as the CD4 construct. (19pp)

11/3,AB/146 (Item 116 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0185240 DBA Accession No.: 95-12061 PATENT
New natural resistance associated macrophage protein - recombinant protein production using plasmid pBabe-lambda-8.1 and retro virus vector and antisense oligonucleotide application in cancer and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
AUTHOR: Barton C H; White J K; Blackwell J M
PATENT ASSIGNEE: Lynxvale 1995
PATENT NUMBER: WO 9520044 PATENT DATE: 950727 WPI ACCESSION NO.:
95-269457 (9535)
PRIORITY APPLIC. NO.: GB 9422021 APPLIC. DATE: 941031
NATIONAL APPLIC. NO.: WO 95GB95 APPLIC. DATE: 950119
LANGUAGE: English
ABSTRACT: A mouse or human natural resistance-associated macrophage protein (NRAMP) having an N-terminal region comprising an Src homology 3 (SH3) binding domain (BD) (with motif PGPAPQPAPCR, PXSPTSPXPXXAPPRXT and/or PTSPTSPGPQQAPPRET) is claimed, where the N-terminal region further comprises at least 1 (preferably 2) protein-kinase-C site (sequences (S,A)PP(R,K)XSRPXXXS(I,V)XSX) (especially SPPRLSRPSYGSISSL or PXSPTSPXPXXAPPRXT) and GPQRLSGSSYGSISS) which flanks the SH3 BD. DNA sequences are disclosed for the SH3 BD and the SH3 BD upstream sequence. Also claimed are: DNA and cDNA sequences encoding NRAMP; plasmid pBabe-lambda-8.1 (NTC 12855); a retro virus vector; a DNA primer pair for amplification of the SH3 BD, a poly gt site, human NRAMP gene exon 2, etc.; a DNA probe specific for SH3 BD sequences; a promoter sequence; an antisense oligonucleotide for autoimmune disease and cancer therapy; a protein fragment of NRAMP; an antibody specific for NRAMP; use of the primer pair and DNA probe in diagnosis of a NRAMP gene mutation. The vectors can be used in gene transfer to hematopoietic stem cells for cancer gene therapy. (75pp)

11/3,AB/147 (Item 117 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0185188 DBA Accession No.: 95-12009
Induction of anti-self-immunity to cure cancer: meeting review - gene therapy, adoptive immunotherapy and antitumor recombinant vaccine production (conference report)
AUTHOR: Nanda N K; Sercarz E E
CORPORATE AFFILIATE: Univ.California
CORPORATE SOURCE: Department of Microbiology and Molecular Genetics, University of California Los Angeles, Los Angeles, California 90024-1489, USA.
JOURNAL: Cell (82, 1, 13-17) 1995
ISSN: 0092-8674 CODEN: CELLB5
CONFERENCE PROCEEDINGS: Tumor Antigens as Self-Antigens, Jennifer Jones Simon Foundation Workshop, Los Angeles, California, 26-27 January, 1995.
LANGUAGE: English
ABSTRACT: Strategies for cancer therapy involving induction of anti-self immunity were considered at a workshop on tumor antigens as self-antigens. Genetic manipulation of tumors designed either to enhance the presentation of tumor-associated antigens or to provide enhanced co-stimulatory signals to T-lymphocytes has been adopted to increase immunogenicity of whole tumor cells. Tumor cells transfected with B7 genes are more potent immunogens than parent tumors, and vaccination with tumor cells transduced with a granulocyte-macrophage colony stimulating factor gene induces long-lasting antitumor immunity, involving both CD4 and CD8 T-lymphocytes. The key to inducing the most potent killing response to a tumor appears to be co-activation of both CD8+ cytotoxic T-lymphocytes and CD4+ Th1 cells specific for the tumor. Antitumor recombinant vaccines, e.g. a tyrosinase (EC-1.14.18.1) gene in a vaccinia virus vector for use against melanoma, were also discussed. Synthetic peptide and cytokine therapies were also considered. (25 ref)

11/3,AB/148 (Item 118 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0181611 DBA Accession No.: 95-05828 PATENT
The autoimmune response of an animal is suppressed - in tissue cells transformed with a recombinant vector which expresses or transcribes a product which inhibits MHC antigen presentation
AUTHOR: Jolly D J; Irwin M J; Warner J F; Dubensky T W; Ibanez C E
PATENT ASSIGNEE: Viagene 1995
PATENT NUMBER: WO 9506718 PATENT DATE: 950309 WPI ACCESSION NO.:
95-115434 (9515)
PRIORITY APPLIC. NO.: US 116983 APPLIC. DATE: 930903
NATIONAL APPLIC. NO.: WO 94US9860 APPLIC. DATE: 940902
LANGUAGE: English
ABSTRACT: Tissue cells of an animal transformed with a recombinant vector are new, the vector directing the expression of a protein or its active portion capable of inhibiting MHC antigen presentation (AP), for use in suppressing an autoimmune response. Also new are: i. tissue cells transformed with a vector that transcribes an antisense message and/or ribozyme, which can inhibit MHC AP; ii. tissue cells transformed with a multivalent vector construct having all the properties above; and iii. a recombinant vector construct as above. The protein can bind beta-2-microglobulin or binds the MHC class I heavy chain molecule intracellularly. The protein is E3/19K or H301. The vector is carried by a virus such as a polio virus, rhino virus, vaccinia virus, influenza virus, adeno virus, adeno-associated virus, herpes simplex virus, measles virus, toga virus, picorna virus, pox virus, adeno virus, parvo virus, herpes virus, paramyxo virus, corona virus or Sindis virus. The vector is a retro virus construct. The cells originate from synovial membrane cells, islet, hepatocytes or keratocytes. (46pp)

11/3,AB/149 (Item 119 from file: 357)

DIALOG(R)File 357:Derwent Biotechnology Abs
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0180956 DBA Accession No.: 95-08976 PATENT
Pharmaceutical composition containing IR-95 - IR-95 gene expression in transgenic mouse using a virus vector by lipofection, for application in virus infection, %%%autoimmune%%% disease and cancer %%%gene%%% %%%therapy%%%
AUTHOR: Iacobelli S; Jallal B; Natoli C; Powell J
PATENT ASSIGNEE: Univ.New-York; Univ.Chieti; Ullrich A 1995
PATENT NUMBER: WO 9512681 PATENT DATE: 950511 WPI
ACCESSION NO.:
95-132127 (9524)
PRIORITY APPLIC. NO.: US 147285 APPLIC. DATE: 931105
NATIONAL APPLIC. NO.: WO 94US12701 APPLIC. DATE: 941104
LANGUAGE: English
ABSTRACT: The following are claimed: (1) a pharmaceutical composition
containing a therapeutically effective amount of IR-95 and a physiologically acceptable carrier; (2) a vector (I) containing a DNA sequence encoding IR-95 within a liposome; (3) a transfected cell line containing (I); (4) a transgenic non-human animal, preferably a transgenic mouse, containing IR-95; (5) a method of treating a disorder by inserting an expression vector containing (I) into a cell, growing the cell in vitro, and infusing the cell to an organism in need of treatment; (6) a method of administering an IR-95 DNA sequence in a virus vector selected from papova virus, adeno virus, vaccinia virus, adeno-associated virus, herpes virus and retro virus of bird, mouse or human origin; (7) a gene therapy product composed of a therapeutically effective amount of nucleic acid encoding IR-95 and a means for administering the nucleic acid. IR-95 antagonists may be used in the manufacture of a medicament for the treatment of an autoimmune disorder, rheumatoid arthritis, allergy or organ transplant rejection. DNA encoding (I) may be used for the treatment of cancer. (82pp)

11/3,AB/150 (Item 120 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0179090 DBA Accession No.: 95-06500 PATENT
Liposomes containing adeno-associated viral material, especially plasmid - liposome plus adeno-associated virus vector-mediated transformation for gene therapy
AUTHOR: Philip R; Lebkowski J
PATENT ASSIGNEE: Appl.Immune-Sci. 1995
PATENT NUMBER: WO 9507995 PATENT DATE: 950323 WPI
ACCESSION NO.:
95-131363 (9517)
PRIORITY APPLIC. NO.: US 120605 APPLIC. DATE: 930913
NATIONAL APPLIC. NO.: WO 94US9774 APPLIC. DATE: 940913
LANGUAGE: English
ABSTRACT: A composition (I) for genetic manipulation consists of a liposome
containing lipid and adeno-associated virus (AAV) material (especially plasmid pMP6-IL2 or plasmid pACMV-IL2) with at least one inverted terminal repeat (ITR). The promoter and genetic material of interest (usually encoding a cytokine, costimulatory factor, major histocompatibility complex class-I molecule, tumor-associated antigen, or multidrug-resistance protein, but especially interleukin-2 or beta-galactosidase (EC-3.2.1.23)) are inserted between 2 ITR. Also claimed are: (a) cells transfected with (I); (b) a method for introducing the genetic sequence into a host cell using (I); (c) vectors containing the genetic sequence of plasmid pMP6; (d) cells modified with such vectors; (e) protein production in cells transfected with (I); (f) production of cellular (I) for treating neoplasms by capturing effector T-lymphocytes on an immobilized specific binding partner; (g) homogenous cell population prepared this way; and (h) homogenous population of CD8+ tumor infiltrating lymphocytes with antibody-free surfaces. (92pp)

11/3,AB/151 (Item 121 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0176544 DBA Accession No.: 95-03365 PATENT
New polynucleotide encoding new polypeptides that modify apoptosis - Bcl-XL, Bcl-XS or Bcl-X1 gene transfer to neuron, lymphocyte or CD4 cell, for use as a diagnostic agent or in gene therapy of cancer, neurodegenerative disease or autoimmune disease
AUTHOR: Thompson C B; Boise L H; Nunez G
PATENT ASSIGNEE: Arch-Develop.; Univ.Michigan 1995
PATENT NUMBER: WO 9500642 PATENT DATE: 950105 WPI
ACCESSION NO.:
95-052079 (9507)
PRIORITY APPLIC. NO.: US 81448 APPLIC. DATE: 930622
NATIONAL APPLIC. NO.: WO 94US7089 APPLIC. DATE: 940622
LANGUAGE: English
ABSTRACT: A new DNA sequence encodes a protein other than Bcl-2 (e.g.
Bcl-XL, Bcl-XS or Bcl-X1), which promotes or inhibits vertebrate programmed cell death (apoptosis). The DNA may be inserted in an expression vector under the control of an enhancer-promoter and transcriptional regulatory signals. The protein may be produced by transfecting a cell with the DNA and expressing the protein in a host. mRNA encoding the protein may be detected by hybridization with a DNA
probe. Apoptosis in a cell may be altered by delivery of the DNA (e.g. by microinjection into the cell, or administration to the circulatory system as naked DNA or within a transformed cell, or combined with a retro virus, vaccinia virus, picorna virus, corona virus, toga virus or rhabdo virus vector or antibody) and expressing the protein. The host cell may be a neuron, lymphocyte or CD4 cell. Recombinant multipotent neural cells may be transplanted into a region of the central nervous system to prevent apoptosis, or the vector may be injected at peripheral nerve endings. The DNA may be used in gene therapy of cancer, neurodegenerative or autoimmune disease. (127pp)

11/3,AB/152 (Item 122 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0175356 DBA Accession No.: 95-02177 PATENT
New inhibitor of stem cell proliferation isolated from bone marrow - recombinant stem cell-inhibitor production by vector expression and application in hematopoiesis stem cell maintenance for use in leukemia, cancer or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
PATENT ASSIGNEE: Pro-Neuron 1994
PATENT NUMBER: WO 9422915 PATENT DATE: 941013 WPI
ACCESSION NO.:
94-357735 (9444)
PRIORITY APPLIC. NO.: US 40942 APPLIC. DATE: 930331
NATIONAL APPLIC. NO.: WO 94US3349 APPLIC. DATE: 940329
LANGUAGE: English
ABSTRACT: A stem cell-inhibitor (I) is claimed. (I) has specific activity (IC50) up to 20 ng/ml in a mouse CFU-spleen assay and has mol.wt. 10,000 by ultrafiltration. (I) is more hydrophobic than macrophage inhibitor protein 7-alpha (MIP-7-alpha) or transforming growth factor-beta by reverse-phase chromatography. Also new are antibodies specific for (I), recombinant DNA encoding (I), and analogs of (I). (I) is used to stimulate B-lymphocyte growth, in leukemia or cancer therapy, for long term maintenance of hematopoietic cells from bone marrow, peripheral or cord blood for subsequent transplantation or gene therapy and for therapy of hyperproliferation of hematopoietic or epithelia stem cells in myeloproliferative or autoimmune diseases (psoriasis or myelodysplasia). (I) can also be used together with virucide agents e.g. in HIV virus therapy. The antibodies can be used to identify or isolate stem cells and to neutralize or detect (I). The dosage is typically 1-100 ug/kg.day. After treatment, cells can be stimulated to divide with colony stimulating factors. (66pp)

11/3,AB/153 (Item 123 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0173668 DBA Accession No.: 95-00489 PATENT
New mitosis-associated nuclear antigen and related DNA - plasmid pMT2SVneo
for use in cancer gene therapy or DNA probe or DNA primer pair for autoimmune disease diagnosis
AUTHOR: Yeo J P; Alderuccio F; Toh B H

PATENT ASSIGNEE: Univ.Monash 1994
PATENT NUMBER: WO 9423029 PATENT DATE: 941013 WPI ACCESSION NO.:
94-333190 (9441)
PRIORITY APPLIC. NO.: AU 938067 APPLIC. DATE: 930331
NATIONAL APPLIC. NO.: WO 94AU158 APPLIC. DATE: 940331
LANGUAGE: English
ABSTRACT: A new DNA sequence encodes a mitosis-associated nuclear antigen
(mol.wt. 47,000), which is capable of being phosphorylated during mitosis and is a substrate for cdc2-kinase. The antigen contains at least 3 S/T-P sequences, 10 consecutive Lys residues, the sequence KKKQRK and has a neutral pI. The DNA contains a 1,254-bp open reading
frame, and may be inserted in a vector, e.g. plasmid pJPZ1L4, plasmid pJPL41.6, plasmid pJPZ1, plasmid pJPZ2, phage lambda-JPL4, or a human
virus vector (e.g. plasmid pMT2SVneo). An ss or ds antisense DNA or RNA
sequence (spanning the promoter and/or start site) which blocks transcription of the antigen gene is also new. The DNA may be incorporated into a liposome. DNA primers specific for the gene are also new. A protein (RMSA-1, mol.wt. 31,000) which has type-1 phosphatase activity activated during mitosis, a mol.wt. 67,000 protein and a mol.wt. 200,000 protein are associated with the new antigen in a complex. The protein or DNA may be used in disruption of mitosis, e.g. in cancer gene therapy or karyotype analysis. Autoimmune disease may be diagnosed using the DNA probe or primers. (80pp)

11/3,AB/154 (Item 124 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0169719 DBA Accession No.: 94-12270 PATENT
Treating cellular abnormality with specific cytotoxic T-lymphocytes - melanoma diagnosis or gene therapy using an HLA-C clone-10 and MAGE-1
tumor-associated antigen presented on an autologous cytotoxic T-lymphocyte cell surface
PATENT ASSIGNEE: Ludwig-Inst.Cancer-Res. 1994
PATENT NUMBER: WO 9416713 PATENT DATE: 940804 WPI ACCESSION NO.:
94-263764 (9432)
PRIORITY APPLIC. NO.: US 8446 APPLIC. DATE: 930122
NATIONAL APPLIC. NO.: WO 94US688 APPLIC. DATE: 940118
LANGUAGE: English
ABSTRACT: A new method for identifying a candidate for therapy with a drug
specific for complexes of HLA-C clone-10 and a MAGE-1 melanoma
tumor-associated antigen-derived peptide involves contacting a sample with autologous cytotoxic T-lymphocytes (CTLs) specific for the complex, and determining lysis of abnormal cells. An agent which provokes a CTL response may be used therapeutically if a positive response is obtained. The method may be used e.g. in melanoma or %%%autoimmune%%% disease diagnosis and %%%gene%%% %%%therapy%%%. The
%%%therapeutic%%% agent may be a vector encoding MAGE-1 and/or HLA-C
clone-10, or a non-proliferative cell presenting the complex on its surface. The genes may be expressed from separate vectors or the same vector. The vector may be e.g. a vaccinia virus vector or in Mycobacterium bovis BCG. The CTLs may be produced by exposing blood
cells to transformed cells (e.g. a transformed CHO cell culture) that produce the complex, to stimulate CTL proliferation. The proliferated CTLs are then returned to the patient. (17pp)

11/3,AB/155 (Item 125 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0169123 DBA Accession No.: 94-11674 PATENT
High molecular weight B lymphocyte growth factor interleukin-14 - recombinant interleukin-14 production by vector expression; cytotoxin, monoclonal antibody, antisense RNA, transgenic animal and recombinant vaccine; potential tumor gene therapy
PATENT ASSIGNEE: Univ.Washington-St.Louis; U.S.Dept.Health+Human-Serv.; Univ.Texas-Syst. 1994
PATENT NUMBER: WO 9416074 PATENT DATE: 940721 WPI ACCESSION NO.:
94-249221 (9430)
PRIORITY APPLIC. NO.: US 5156 APPLIC. DATE: 930115
NATIONAL APPLIC. NO.: WO 94US1101 APPLIC. DATE: 940118
LANGUAGE: English
ABSTRACT: DNA (I) encoding at least a fragment of high mol.wt. B-lymphocyte
growth factor (II), which stimulates B-lymphocyte proliferation and inhibits B-lymphocyte differentiation, is claimed. Preferably, (II) is mammalian interleukin-14 of isoelectric point 7.8. Also new are: (1) pure (II); (2) a fusion protein of (II); (3) producing at least a fragment of (II) by introducing an expression vector containing (I) and regulatory sequences into a host, allowing the host to produce (II) and purifying (II); (4) a pure polyclonal or monoclonal antibody binding to at least a fragment of (II); (5) a cytotoxic composition comprising a toxin (high energy emitting radionuclide, abrin, gelonin, ricin, Pseudomonas exotoxin, diphtheria exotoxin, pokeweed antiviral protein) coupled to at least a fragment of (II); (6) a nucleotide encoding an antisense RNA transcript specific for mRNA of (II); (7) a composition for inhibiting B-lymphocyte proliferation in vivo containing (I), (II), (5) or (4); (8) a (II)-based vaccine; (9) a transgenic animal expressing (II); (10) a transformed cell line; (11) cancer therapy; and (12) immune system enhancement using B-lymphocytes proliferated with (II). (95pp)

11/3,AB/156 (Item 126 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0168517 DBA Accession No.: 94-11068 PATENT
Promoter sequence of the p55 tumor necrosis factor receptor - DNA sequence motif application in septic shock, rheumatism, %%%autoimmune%%% disease, etc., %%%gene%%% %%%therapy%%%
PATENT ASSIGNEE: Yeda-Res.Develop. 1994
PATENT NUMBER: EP 606869 PATENT DATE: 940720 WPI ACCESSION NO.: 94-226810
(9428)
PRIORITY APPLIC. NO.: IL 104355 APPLIC. DATE: 930110
NATIONAL APPLIC. NO.: EP 94100243 APPLIC. DATE: 940110
LANGUAGE: English
ABSTRACT: A human p55 tumor necrosis factor receptor (TNFR) promoter (I) is
claimed, which is contained within a 976 bp sequence upstream from the 5' end of the human p55 TNFR gene in a NheI-PstI, NheI-EcoRI or BglII-EcoRI DNA fragment. Preferably (I) comprises bp -355 to -287 of human p55 TNFR. Also claimed are: a sequence motif capable of binding to a transcription factor and optionally together with further sequences flanking it and/or connecting it to at least 1 other sequence motif; a method for preparing a sequence motif involving deleting unwanted sequences upstream and/or downstream of the desired motif, inserting the motif into a vector with control sequences, inserting the vector into a prokaryote and culturing the transformant; a method for isolaing factors binding to motifs or motif regions comprising screening a human gene bank using a motif sequence or a motif region as a probe; a gene cloned using a motif or motif region or a factor obtained by any of the new methods as probes; and a composition for modulating TNF function, e.g. gene therapy, comprising a motif or motif region. (14pp)

11/3,AB/157 (Item 127 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0166685 DBA Accession No.: 94-09236 PATENT
Genetically engineered cell for inducing tolerance to specific tissue - recombinant keratinocyte for diabetes, Grave disease, arthritis, Myasthenia gravis, autoimmune infertility, transplant rejection prevention by intracellular immunization; gene therapy
PATENT ASSIGNEE: Diacrin 1994
PATENT NUMBER: WO 9411011 PATENT DATE: 940526 WPI ACCESSION NO.:

94-183148 (9422)
PRIORITY APPLIC. NO.: US 973776 APPLIC. DATE: 921109
NATIONAL APPLIC. NO.: WO 93US10534 APPLIC. DATE: 931103
LANGUAGE: English
ABSTRACT: Cells (preferably parenchyma cells, especially keratinocytes) genetically engineered with DNA encoding a number of antigens of a cell, tissue or organ to which tolerance is to be induced are claimed. The DNA preferably encodes antigens from pancreatic beta cells, thyroid follicular cells, synovial joint cells, muscle cells, nerve cells, ovary cells or testicular cells. Also claimed are: (1) a method for therapy of autoimmune disease (type-I diabetes, Grave disease, rheumatoid arthritis, Myasthenia gravis, multiple sclerosis, female autoimmune infertility or male autoimmune infertility) involving administering to a patient the claimed genetically engineered cells; (2) a method for prevention of the onset of an autoimmune disease involving administering to a patient cells genetically engineered with DNA encoding a number of antigens of a cell, tissue or organ to which tolerance is to be induced; and (3) a method for preventing transplant rejection involving administering to a patient the genetically engineered cells. The desired cDNA is cloned in e.g. SV40 virus or cattle papilloma virus vectors and transfected into the keratinocytes for transformation. (18pp)

11/3,AB/158 (Item 128 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0166681 DBA Accession No.: 94-09232 PATENT
Nucleic acid construct which inhibits or regulates the function of an immune response gene in a system, e.g. a cell or organ - antisense DNA, antisense RNA oligonucleotide; application in major histocompatibility complex-associated immune response gene regulation; potential in %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
PATENT ASSIGNEE: Enzo-Ther. 1994
PATENT NUMBER: EP 601585 PATENT DATE: 940615 WPI
ACCESSION NO.: 94-185007
(9423)
PRIORITY APPLIC. NO.: US 988256 APPLIC. DATE: 921209
NATIONAL APPLIC. NO.: EP 93119894 APPLIC. DATE: 931209
LANGUAGE: English
ABSTRACT: A nucleic acid (NA) construct is claimed which inhibits or regulates the function of an immune response gene in a system of its host cell. Also claimed is an immunologically compatible system containing the construct. In a preferred construct, an NA segment is contained that produces an NA sequence complementary to at least some of an RNA sequence transcribed from the gene, to inhibit or regulate its function. It further contains a transcription promoter and terminator segments, with the NA segment between these. The construct may contain more than 1 complementary NA sequence. The NA sequence is
an association constant increasing modifier, an association increasing modifier and/or intercalating agent. The immune response gene is part of the MHC. The system is preferably mammalian, more preferably pig or monkey. The NA construct is introduced int the system using a vector, preferably a plasmid or a virus in the form of an antisense oligonucleotide. The construct can be introduced into embryonic cells. The construct may be used in %%%autoimmune%%% disease %%%gene%%%
%%%therapy%%%. (18pp)

11/3,AB/159 (Item 129 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0165515 DBA Accession No.: 94-08066
Prevention of autoimmune lysis by T cells with specificity for a heat shock protein by antisense oligonucleotide treatment - %%%autoimmune%%% disease %%%gene%%% %%%therapy%%% in cytotoxic
T-lymphocyte-stressed
Schwann and bone marrow macrophage cell culture using heat shock protein-60 antisense DNA
AUTHOR: Steinhoff U; Zuegel U; Wand-Wuerttenberger A; Hengel H; Roesch
R; +Kaufmann S H E
CORPORATE AFFILIATE: Univ.Ulm
CORPORATE SOURCE: Department of Immunology, University of Ulm, Albert-Einstein-Allee 11, D-89070 Ulm, Germany.
JOURNAL: Proc.Natl.Acad.Sci.U.S.A. (91, 11, 5085-88) 1994
CODEN: PNASA6
LANGUAGE: English
ABSTRACT: Autoimmune destruction of stressed Schwann cells and bone marrow
macrophage by cytotoxic T-lymphocytes raised against the mycobacterial heat shock protein 60 (hsp60) was inhibited by the use of hsp60-specific antisense oligonucleotides (A-ONs). Hsp60 was obtained from cultures of recombinant Escherichia coli M1103 expressing Mycobacterium bovis hsp60. Target cells were cultured in 96 well flat-bottom microtiter plates at a density of 10,000 cells/well. Adherently growing cells were incubated with A-ONs or sense oligonucleotides for 8 hr before interferon-gamma stimulation, infection with Mycobacterium leprae, or infection with mouse cytomegalo virus vector. After careful washing, effector cytotoxic T-lymphocytes were added at different ratios. The inhibitory effect of hsp60 A-ONs was specific because lysis of mouse cytomegalo virus-infected host cells by virus-specific cytotoxic lymphocytes was not affected. Endogenous hsp60 participates in the recognition of stressed host cell by mycobacterial hsp60-cross-reactive T-lymphocytes, thus autoimmune reactions may be inhibited by target-cell treatment with specific A-ONs. (32 ref)

11/3,AB/160 (Item 130 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 1999 Derwent Publ Ltd. All rts. reserv.

0164906 DBA Accession No.: 94-07457 PATENT
PP14-based gene therapy of autoimmune disease or leukemia - using PP14.1 and PP14.2 antisense DNA, antisense RNA, ribozyme or triplex DNA; recombinant PP14 receptor preparation
PATENT ASSIGNEE: Tykocinski M K 1994
PATENT NUMBER: WO 9407366 PATENT DATE: 940414 WPI
ACCESSION NO.:
94-135098 (9416)
PRIORITY APPLIC. NO.: US 954802 APPLIC. DATE: 920930
NATIONAL APPLIC. NO.: WO 93US9216 APPLIC. DATE: 930928
LANGUAGE: English
ABSTRACT: A method is claimed for treating a patient with non-AIDS immunosuppression which involves administering a reagent which prevents or reduces binding of a PP14 isoform to its receptor. Also claimed are: a method for cloning a PP14 receptor by determining its amino acid sequence and screening a library for a clone, using an oligonucleotide probe corresponding to the PP14 receptor sequence; a method for producing an antibody specific for a PP14 polypeptide, by immunizing a host with part of a receptor for a PP14 polypeptide; a method for identifying a reagent (antisense DNA, antisense RNA, ribozyme or a nucleic acid forming triplex DNA) which blocks transcription of PP14; antibodies specific for PP14.1 and PP14.2; an anti-idiotype antibody against PP14, which competes for binding to, but does not activate, a cellular receptor for PP14; a purified or recombinant PP14 receptor; and a cell comprising a transcriptional DNA cassette containing a PP14 coding region. The method is useful for treating autoimmune diseases e.g. rheumatoid arthritis, allergies, transplant rejection or graft-versus-host disease, and leukemia. (60pp)

11/3,AB/161 (Item 131 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 1999 Derwent Publ Ltd. All rts. reserv.

0164293 DBA Accession No.: 94-06844
Prospects of gene therapy in pneumology - cystic fibrosis, %%%autoimmune%%%
disease, tumor, etc., %%%gene%%% %%%therapy%%% using retro virus or
adeno virus vector; a review
AUTHOR: Siegfried W
CORPORATE AFFILIATE: Univ.Friedrich-Alexander
CORPORATE SOURCE: Krankenhaus Grosshansdorf, Zentrum fuer Pneumologie und
Thoraxchirurgie, Woehrendamm 80, D-22927 Grosshansdorf, Germany.
JOURNAL: Pneumologie (48, 4, 217-24) 1994
CODEN: PNMGAU
LANGUAGE: German
ABSTRACT: Somatic gene therapy attempts to correct a defect in cells of a

particular organ, e.g. a faulty or functionless protein, and to minimize side-effects and interference with other cellular functions. Although a recombinant retro virus was applied successfully for immune deficiency gene therapy, a recombinant adeno virus was preferred for pneumological gene therapy. Therapy of alpha-1-antitrypsinase-deficienc y, which can lead to the development of lung emphysema, has been studied. Various schemes using neutrophil elastase gene, and later inhalants providing transfer of therapeutic genetic material directly into the lung epithelium cells, have been tested in vitro and in animals. In cystic fibrosis 70% of cases lack 3 base-pairs in chromosome-7. Application of the appropriate gene linked to recombinant adeno virus was made 1st in-vitro then in vivo in animals. Breeding of transgenic mice with cystic fibrosis has allowed inhalants and other methods of treatment to be tested. Possible treatment of tumors by gene therapy is discussed together with safety, ethical and legal considerations. (78 ref)

11/3,AB/162 (Item 132 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0154776 DBA Accession No.: 93-12828 PATENT
Zwitterionic antisense oligonucleotide production - application in cancer and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
PATENT ASSIGNEE: Pharmagenics 1993
PATENT NUMBER: WO 9315742 PATENT DATE: 930819 WPI ACCESSION NO.:
93-272546 (9334)
PRIORITY APPLIC. NO.: US 833146 APPLIC. DATE: 920210
NATIONAL APPLIC. NO.: WO 93US768 APPLIC. DATE: 930126
LANGUAGE: English
ABSTRACT: Antisense oligonucleotides, in which at least 1 nucleotide includes a phosphate moiety of formula (I) (where X = a zwitterionic moiety) are new. More specifically X is of formula (II) (where n = 0 or 1, Y = (Z)p-R1, R1 = a hydrocarbon, P = 0 or 1, Z = O, S or NR2, R2 = H or a hydrocarbon, M+ = +NR3R4R5, R3-R5 = H or a hydrocarbon (especially H) and A- = COO-, SO3- or PO3(2-). The oligonucleotides bind to RNA, DNA, proteins and peptides, and may be used to modify the phenotype of cells and to limit proliferation of viruses, bacteria, protozoa, Mycoplasma spp., Chlamydia, etc. They may be used to protect organisms from a variety of pathogens e.g. pneumococci, or to limit proliferation of carcinoma cells, sarcoma cells, lymphoma cells, specific B-lymphocytes, T-lymphocytes, etc., and can be used in cancer or %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%, or as an aid during organ transplantation. In an example, an unmodified oligonucleotide containing a phosphorothiolate group at the 5'-terminal linkage of the 15-mer was synthesized on a DNA synthesizer. Removal of protecting groups produced a zwitterionic oligonucleotide. (25pp)

11/3,AB/163 (Item 133 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0139941 DBA Accession No.: 92-12433 PATENT
Treatment of autoimmune diseases e.g. rheumatoid arthritis - recombinant T-lymphocyte receptor peptide production; may be used for recombinant vaccine production, and rheumatoid arthritis, multiple sclerosis and %%%autoimmune%%% disease %%%gene%%% %%%therapy%%%
PATENT ASSIGNEE: Immune-Response 1992
PATENT NUMBER: WO 9212996 PATENT DATE: 920806 WPI ACCESSION NO.:
92-284600 (9234)
PRIORITY APPLIC. NO.: US 644611 APPLIC. DATE: 910122
NATIONAL APPLIC. NO.: WO 92US482 APPLIC. DATE: 920121
LANGUAGE: English
ABSTRACT: Vaccines for preventing or treating T-lymphocyte (TL) mediated diseases in vertebrates, contain at least 1 pure TL receptor (TCR) which is present on cells which mediate the disease, plus an acceptable medium. TCR can be replaced by: i. anti-idiotype antibodies (AAb); ii. a TL having a receptor comprising the beta-chain variable regions of V-beta-3,-14 or -17; or iii. nucleic acid encoding TCR or its immunogenic fragments, in expressible form. Also new are: a. peptide SGDQGGNE; b. peptides (II) from a TCR beta-chain reactive with a superantigen associated with TL disease; c. peptides of formula X1-X2-E-X3 (III), where X1 and X3 = 1 or more amino acids and X2 = R or K; and d. vectors containing nucleic acids which encodes TCR. More specifically, TCR comprises the sequence of V-beta-3, -14 or especially -17. Also claimed is a method of preventing or treating a TL mediated pathology by administering a nucleic acid encoding the TCR in a form capable of being expressed in the individual, e.g. gene therapy. The vaccines are used to control rheumatoid arthritis or multiple sclerosis, but can also be used against other autoimmune diseases. (87pp)

11/3,AB/164 (Item 134 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0115606 DBA Accession No.: 91-03248 PATENT
Separation of cells from a mixture by depletion or positive selection - cell recovery using receptors specific for ligand present on cells, for preparation of compositions to treat AIDS, cancer and %%%autoimmune%%% disease and %%%gene%%% %%%therapy%%%
PATENT ASSIGNEE: Appl.ImmuneSci. 1991
PATENT NUMBER: EP 405972 PATENT DATE: 910102 WPI ACCESSION NO.: 91-009282
(9102)
PRIORITY APPLIC. NO.: US 374091 APPLIC. DATE: 890629
NATIONAL APPLIC. NO.: EP 90307080 APPLIC. DATE: 900628
LANGUAGE: English
ABSTRACT: A method for changing the composition of a mixture of replicable biological particles, uses receptors specific for at least 1 ligand present on the particles; the receptors are bound to a smooth, plastic surface in a uniform dense distribution to provide saturation for a uniform layer of particles. The method is effected by: i. contacting the surface with the mixture of particles to allow binding; ii. vigorously removing non-specifically bound particles without disturbing those bound specifically; and iii. releasing the particles, free of receptor, by mechanical disruption or mitogenic release with a mitogenic agent. Also claimed are methods for the preparation of specific therapeutic compositions for the treatment of AIDS, cancer and in gene therapy. Methods are also claimed for the preparation of homogeneous populations of: a. lymphokine-activated killer cells; and b. activated T-lymphocytes. A homogeneous population of cells prepared according to the above methods is also claimed. The method allows the effective separation of cells from a mixture using depletion or positive selection to provide a cellular population of interest. (19pp)
? log

09/336672

=> s iddm or insulitis or nod
L1 35566 IDDM OR INSULITIS OR NOD

=> s gad or (glutamic acid decarboxylase)
L2 16806 GAD OR (GLUTAMIC ACID DECARBOXYLASE)

=> s l1 and l2

L3 1735 L1 AND L2

=> s autoantigen?
L4 27416 AUTOANTIGEN?

=> s l1 and l2 and l4
L5 649 L1 AND L2 AND L4

=> dup rem l5
PROCESSING COMPLETED FOR L5
L6 288 DUP REM L5 (361 DUPLICATES REMOVED)

=> s l6 and py<1999
1 FILES SEARCHED...
3 FILES SEARCHED...
4 FILES SEARCHED...
L7 206 L6 AND PY<1999

=> s dna or plasmid or (nucleic acid) or oligonucleotide or polynucleotide
L8 2654048 DNA OR PLASMID OR (NUCLEIC ACID) OR OLIGONUCLEOTIDE OR POLYNUCLE
OTIDE

=> s vaccin?

L9 393129 VACCIN?

=> s l7 and l8

L10 19 L7 AND L8

=> s l7 and l9

L11 4 L7 AND L9

=> s l10 or l11
L12 22 L10 OR L11

=> d l12 ibib abs 1-22

L12 ANSWER 1 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1997:318516 BIOSIS
DOCUMENT NUMBER: PREV199799609004
TITLE: Expression of properly folded human glutamate decarboxylase
65 as a fusion protein in Escherichia coli.
AUTHOR(S): Papouchado, Mariana L.; Valdez, Silvina N.; Ghiringhelli,
Daniel; Poskus, Edgardo; Ermacora, Mario R. (1)
CORPORATE SOURCE: (1) Univ. Nacional Quilmes, Dep. Ciencia Tecnol., Roque
Saenz Pena 180, 1876 Bernal, Buenos Aires Argentina
SOURCE: European Journal of Biochemistry, (1997) Vol. 246, No. 2,
pp. 350-359.
ISSN: 0014-2956.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Autoantibodies to the islet-cell 65-kDa variant of glutamate decarboxylase
(GAD65) are found in most insulin-dependent diabetes mellitus (***IDDM***) patients many years before the appearance of clinical symptoms of the disease. As ***IDDM*** -preventive therapies may be available in the future, an international effort is taking place to develop widely applicable anti- ***GAD*** immunochemical tests. These
tests would help to detect individuals at risk before the full installation of the disease and to enroll them in prevention programs. Autoantibodies to GAD65 are mostly directed to conformational epitopes, and the enzyme is a complex molecule with a prosthetic group and 15 cysteine residues. Thus, the conformational integrity of GAD65 is essential for an appropriate anti- ***GAD*** assay. Isolation of large amounts of GAD65 from pancreas or other tissues is impractical, and no successful production of properly folded GAD65 has been reported in bacteria. Native recombinant GAD65 for immunochemical tests is usually obtained from eukaryotic expression systems. Since the large-scale production of a recombinant protein in an eukaryotic system is expensive and technically difficult, we investigated the expression of GAD65 in Escherichia coli as an alternative. A number of ***DNA*** constructs intended to export the enzyme to the periplasmic space or to improve its cytoplasmic solubility were designed and tested. Our results provide a solution to the two main problems associated with the expression of GAD65
in E. coli: misfolding, leading to the formation of inclusion bodies; and the presence of alternative initiation sites for translation that causes the preferential production of truncated variants of GAD65. We describe here the production of properly folded, fully active, and immunochemically
competent GAD65 as an N-terminal fusion protein with thioredoxin. An account of the reactivity of the produced protein with sera of six ***IDDM*** patients is also presented.

L12 ANSWER 2 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:462246 BIOSIS
DOCUMENT NUMBER: PREV199699184602
TITLE: Cloning of candidate ***autoantigen*** carboxypeptidase H from a human islet Library: Sequence identity with human brain CPH.
AUTHOR(S): Alcalde, Laura (1); Tonacchera, Massimo; Costagliola, Sabine; Jaraquemada, Dolores; Pujol-Borrell, Ricardo; Ludgate, Marian
CORPORATE SOURCE: (1) Immunology Unit, Hosp. Universitari Germans Trias i
Pujol, Ctra del Canyet s/n, PO Box 72, 08916 Badalona, Barcelona Spain
SOURCE: Journal of Autoimmunity, (1996) Vol. 9, No. 4, pp. 525-528.
ISSN: 0896-8411.
DOCUMENT TYPE: Article
LANGUAGE: English
AB A number of proteins, many of them enzymes, i.e. ***glutamic*** ***acid*** ***decarboxylase*** (***GAD***), carboxypeptidase H,
37-40 K tyrosin phosphatase (ICA512, IA2/ IA2-beta), have been proposed as
islet ***autoantigens*** . involved in the pathogenesis of ***IDDM***
. Until recently, progress in their characterization has been impeded by the inaccessibility of the human pancreas, resulting in many of them being cloned from animal or non-islet sources. Carboxypeptidase H, one of these enzymes, has been cloned and sequenced from human brain and from rat islets but not from human islets. In this study, we describe the production of a human islet cDNA library and the cloning of islet CPH from
it. Since CPH clones were also detected in a human thyroid library, we have sequenced CPH from these two endocrine tissue libraries and compared
them to the known brain sequence. The sequences from islets and thyroid were identical and differed from brain only in the absence of a second ATG
in the predicted 5'non-coding region. Northern blot analysis revealed the presence of an identical 2.5 kb transcript in human islets, thyroid and brain. The confirmation of the existence of a single isoform of CPH expressed in brain and endocrine tissues samples future experiments to elucidate the role of CPH as ***autoantigen*** .

L12 ANSWER 3 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:227169 BIOSIS
DOCUMENT NUMBER: PREV199698783298
TITLE: Characterization of human ***DNA*** topoisomerase II as
an ***autoantigen*** recognized by patients with ***IDDM*** .
AUTHOR(S): Chang, Yih-Hsin; Hwang, Jaulang; Shang, Huey-Fang;

Tsai,
Shih-Tzer (1)
CORPORATE SOURCE: (1) Clinical Res. Cent., Veterans Gen. Hosp., Shih-Pai,
Taipei 11217 Taiwan
SOURCE: Diabetes, (1996) Vol. 45, No. 4, pp. 408-414.
ISSN: 0012-1797.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Autoantibodies against several cytoplasmic ***autoantigens*** such as ***glutamic*** ***acid*** ***decarboxylase*** , heat shock protein 65, insulin, and carboxypeptidase H have been identified in the sera of patients with ***IDDM*** . To investigate whether type II ***DNA*** topoisomerase (TopII) is an ***autoantigen*** in ***IDDM*** patients, we have constructed a series of overlapping ***DNA*** TopII fragments that covered the entire length of this enzyme.
These fragments were used as antigens to screen sera of ***IDDM*** patients. We have examined 195 Chinese ***IDDM*** patients (mean age 14.2 +- 7.5 years, age at onset 9.2 +- 6.4 years, duration of diabetes 4.6 +- 3.4 years) and 51 nondiabetic individuals. The results showed that ***DNA*** TopII autoantibodies were detected in 49.2 and 47.2% of ***IDDM*** patients using purified TopII fragments and full-length TopII as antigens, respectively. The frequency of anti-TopII positivity was relatively stable irrespective of sex and disease duration. The patients were slightly older at onset and the prevalence of antithyroglobulin/anti-microsomal autoantibodies was twice that in the ***IDDM*** subgroup positive for anti-TopII than in ***IDDM*** patients who were negative for anti-TopII. We also characterized the epitopes of ***DNA*** TopII that were recognized by ***IDDM*** sera. Those epitopes resided mostly in three distinct domains. One resided in amino acid residues 1-147, another in amino acid residues 286-472, and the third in the COOH-terminal one-third of ***DNA*** TopII. Intriguingly, we found that these epitopes shared similarity (up to 36% identity and 63.6% homology) to previously identified epitopes of ***IDDM*** ***autoantigens*** .

L12 ANSWER 4 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1995:549135 BIOSIS
DOCUMENT NUMBER: PREV199698563435
TITLE: Radioimmunoassays for ***glutamic*** ***acid*** ***decarboxylase*** (GAD65) and GAD65 autoantibodies using 35S or 3H recombinant human ligands.
AUTHOR(S): Falorni, Alberto (1); Ortqvist, Eva; Persson, Bengt; Lernmark, Ake
CORPORATE SOURCE: (1) Lab. Mol. Immunol., Dep. Mol. Med., Karolinska Hosp.,
M3:00, S-17176 Stockholm Sweden
SOURCE: Journal of Immunological Methods, (1995) Vol. 186, No. 1,
pp. 89-99.
ISSN: 0022-1759.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Autoantibodies are an important marker of human autoimmune diseases and the development of simple, precise and reproducible immunoassays to detect autoantibodies is important to our understanding of human autoimmunity. GAD65 autoantibodies occur frequently in insulin-dependent diabetic patients and is a useful marker for ***IDDM*** . A RIA to detect immunoreactive GAD65 has not been described. In the present study we describe a semi-automated fluid-phase immunoassay for the rapid detection of GAD65 autoantibodies in human serum. We also developed a sensitive RIA to determine immunoreactive human GAD65 in biological fluids and in vitro cell systems. Using in vitro translated recombinant human GAD65 in a multiwell-adapted procedure, our GAD65Ab RIA combines high specificity and sensitivity with a high capacity to analyze a large number of samples. In this report the three critical steps in the GAD65Ab RIA, ***DNA*** preparation, in vitro translation and immunoprecipitation, have been optimized. In our RIA, GAD65Ab were detected in 116/155 (75%) new onset Swedish ***IDDM*** children and in 1/85 (1.2%) healthy controls. In an immunoassay to detect autoantibodies against the proinsulin converting enzyme 2 (PC-2) no such antibodies were detected in ***IDDM*** patients. In the GAD65 RIA the lower detection limit was 2 ng/ml (31 fmol/ml). Our data demonstrate that ***autoantigen*** radioligands produced by in vitro translation are useful in RIA for autoantibodies and ***autoantigens*** in studies of human autoimmunity.

L12 ANSWER 5 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1995:267644 BIOSIS
DOCUMENT NUMBER: PREV199598281944
TITLE: Cytotoxic T cells specific for ***glutamic*** ***acid*** ***decarboxylase*** in autoimmune diabetes.
AUTHOR(S): Panina-Bordignon, Paola (1); Lang, Rosmarie; Van Endert,
Peter M.; Benazzi, Elena; Felix, Arthur M.; Pastore, Rocco M.; Spinas, Giatgen A.; Sinigaglia, Francesco
CORPORATE SOURCE: (1) Roche Milano Ricerche, Via Olgettina 58, 20132 Milano
Italy
SOURCE: Journal of Experimental Medicine, (1995) Vol. 181, No. 5,
pp. 1923-1927.
ISSN: 0022-1007.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Insulin-dependent diabetes mellitus (***IDDM***) is an autoimmune disease that results in the destruction of the pancreatic islet beta cells. ***Glutamic*** ***acid*** ***decarboxylase*** (***GAD***) has been recently indicated as a key ***autoantigen*** in the induction of ***IDDM*** in nonobese diabetic mice. In human diabetes, the mechanism by which the beta cells are destroyed is still unknown. Here We report the first evidence for the presence of ***GAD*** -specific cytotoxic T cells in asymptomatic and recent diabetic patients. GAD65 peptides displaying the human histocompatibility leukocyte antigen (HLA)A*0201 binding motif have been synthesized. One of these peptides, GAD114-123, binds to HLAA* 0201 molecules in an HLA assembly assay. Peripheral blood mononuclear cells from individuals with preclinical ***IDDM*** , recent-onset ***IDDM*** , and from healthy controls were stimulated in vitro with the selected peptide in the presence of autologous antigen-presenting cells. In three cases (one preclinical ***IDDM*** and two recent-onset ***IDDM***), we detected specific killing of autologous antigen-presenting cells when incubated with GAD114-123 peptide or when infected with a recombinant ***vaccinia*** virus expressing GAD65. These patients were the only three carrying the HLA-A*0201 allele among the subjects studied. Our finding suggests that ***GAD*** -specific cytotoxic T lymphocytes may play a critical role in the initial events of ***IDDM*** .

L12 ANSWER 6 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1995:123358 BIOSIS
DOCUMENT NUMBER: PREV199598137658
TITLE: Isolation by anion-exchange of immunologically and enzymatically active human islet ***glutamic*** ***acid*** ***decarboxylase*** 65 overexpressed in Sf9 insect cells.
AUTHOR(S): Moody, A. J. (1); Hejnaes, K. R.; Marshall, M. O.; Larsen,
F. S.; Boel, E.; Svendsen, I.; Mortensen, E.; Dyrberg, T.
CORPORATE SOURCE: (1) Diabetes Care DIv., Novo Nordisk A/S, Novo Alle, 2880
Bagsvaerd Denmark

SOURCE: Diabetologia, (1995) Vol. 38, No. 1, pp. 14-23.
ISSN: 0012-186X.
DOCUMENT TYPE: Article
LANGUAGE: English
AB The enzyme L- ***glutamic*** ***acid*** ***decarboxylase*** is
a major ***autoantigen*** of the beta cell. Autoantibodies against this enzyme are observed before the onset of insulin-dependent diabetes mellitus (***IDDM***) in man and may be of predictive value. There is evidence that this enzyme is involved in the development of autoimmune diabetes in animals. In order to faciliate the investigation of the role of L-glutamine acid decarboxylase in ***IDDM*** , we expressed the 65
kDa isoform of human islet L- ***glutamic*** ***acid*** ***decarboxylase*** in insect cells using a baculovirus-based vector. The material was expressed at high levels (up to 50 mg/l of cells). Partially purified metabolically labelled L- ***glutamic*** ***acid*** ***decarboxylase*** bound to immunoglobulins in the sera
from 20 of 49 subjects with newly-diagnosed ***IDDM*** . The enzyme was
isolated in high yields (up to 26 mg/l cell culture) with fully maintained enzymatic activity by either ion-exchange chromatography or immunoaffinity
chromatography. Purified L- ***glutamic*** ***acid*** ***decarboxylase*** inhibited the binding of radioactive L- ***glutamic*** ***acid*** ***decarboxylase*** , prepared by in vitro translation of mRNA, to immunoglobulins in the sera of subjects with ***IDDM*** . Recombinant human islet L- ***glutamic*** ***acid***
decarboxylase , isolated from Sf9 cells, is a suitable material for the large scale investigation of the utility of this enzyme in the prediction and prevention of autoimmune diabetes.

L12 ANSWER 7 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1993:318636 BIOSIS
DOCUMENT NUMBER: PREV199396026986
TITLE: Cloning and expression of large isoform of ***glutamic*** ***acid*** ***decarboxylase*** from human pancreatic islet.
AUTHOR(S): Kawasaki, Eiji (1); Moriuchi, Ryozo; Watanabe, Motoo; Saitoh, Kazuko; Brunicardi, F. Charles; Watt, Philip C.; Yamaguchi, Takashi; Mullen, Yoko; Akazawa, Shoichi; et al.
CORPORATE SOURCE: (1) First Dep. Internal Med., Nagasaki Univ. Sch. Med.,
Nagasaki 852 Japan
SOURCE: Biochemical and Biophysical Research Communications, (1993)
Vol. 192, No. 3, pp. 1353-1359.
ISSN: 0006-291X.
DOCUMENT TYPE: Article
LANGUAGE: English
AB ***Glutamic*** ***acid*** ***decarboxylase*** (***GAD***)
catalyzes formation of gamma-aminobutyric acid from glutamic acid and is a
major ***autoantigen*** in insulin-dependent diabetes mellitus. Its two isoforms, GAD65 and GAD67, are encoded by two separate genes. We
prepared human islet cDNA library and screened it with cDNA probes of rat
brain GAD67. We cloned the cDNA for GAD67, the large isoform of ***glutamic*** ***acid*** ***decarboxylase*** , and determined its nucleotide sequence. Sequencing of the resulting clone identified a 1,785 residue open-reading frame encoded a 594 amino acid polypeptide that
showed a 99.4% similarity with GAD67 from human brain. The bacterially
expressed human islet GAD67 protein was enzymatically active and immunoreactive. The isolation of cDNA for this additional islet ***GAD*** isoforms will be important in studying the etiology and pathogenesis of ***IDDM*** .

L12 ANSWER 8 OF 22 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1991:525082 BIOSIS
DOCUMENT NUMBER: BA92:136542
TITLE: CLONING CHARACTERIZATION AND AUTOIMMUNE RECOGNITION OF RAT
ISLET ***GLUTAMIC*** ***ACID*** ***DECARBOXYLASE*** IN INSULIN-DEPENDENT DIABETES
MELLITUS.
AUTHOR(S): MICHELSEN B K; PETERSEN J S; BOEL E; MOLDRUP A; DYRBERG T;
MADSEN O D
CORPORATE SOURCE: HAGEDORN RES. LAB., NIELS STEENSENSVEJ 6, DK-2820 GENTOFTE,
DENMARK.
SOURCE: PROC NATL ACAD SCI U S A, (1991) 88 (19), 8754-8758.
CODEN: PNASA6. ISSN: 0027-8424.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB A 64-kDa islet protein is a major ***autoantigen*** in insulin-dependent diabetes mellitus (***IDDM***). Autoantibodies against the 64-kDa protein were recently shown to immunoprecipitate ***glutamic*** ***acid*** ***decarboxylase*** (***GAD*** ; L-glutamate 1-carboxy-lyase, EC 4.1.1.15) from brain and from islets. We present evidence that the autoantisera also recognize a hydrophilic islet protein or .apprxeq.67 kDa in addition to the amphiphilic 64-kDa form. We
have isolated a full-length rat islet ***GAD*** cDNA encoding a hydrophilic 67-kDa protein, which appears to be identical to the rat brain 67-kDa ***GAD*** . A partial sequence of human insulinoma 67-kDa
GAD was identical to human brain 67-kDa ***GAD*** . Allelic
variations were observed in rats as well as in human 67-kDa ***GAD*** sequences. The expressed rat islet 67-kDa ***GAD*** protein is functional and is immunoprecipitated by ***IDDM*** sera; it comigrates
electrophoretically with the 67-kDa islet ***autoantigen*** . The hydrophilic 67-kDa form of ***GAD*** in islets is an additional ***autoantigen*** in ***IDDM*** and is recognized by a different subset of autoantibodies than the 64-kDa ***autoantigen*** . Thus, mammalian cell lines expressing functionally active, recombinant ***GAD*** may become important tools to study the nature and the role of
GAD autoreactivity in ***IDDM*** .

L12 ANSWER 9 OF 22 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 97180891 EMBASE
DOCUMENT NUMBER: 1997180891
TITLE: Pharmacological approaches to the prevention of autoimmune
diabetes.
AUTHOR: Winter W.E.; House D.V.; Schatz D.
CORPORATE SOURCE: Dr. W.E. Winter, University of Florida, College of
Medicine, Dept. Pathology Laboratory Medicine, PO Box 100275, Gainesville, FL 32610-0275, United States
SOURCE: Drugs, (1997) 53/6 (943-956).
Refs: 118
ISSN: 0012-6667 CODEN: DRUGAY
COUNTRY: New Zealand
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
006 Internal Medicine
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Insulin-dependent (type I) diabetes mellitus (***IDDM***) is the consequence of a chronic cell-mediated immune attack upon the insulin-producing .beta.-cells. Progressive insulinopenia is characteristic of individuals who eventually develop ***IDDM*** . Autoimmunity develops because of a failure in self-nonself discrimination. Autoimmunity is usually detected when autoantibodies are present in the patient's serum. However, autoantibodies are not synonymous with disease,
as many autoantibody-positive individuals show no evidence of clinical disease. Studies initiated in the early 1980s demonstrated that short term

remission from ***IDDM*** could be induced or lengthened with immunosuppressive therapy. However, no long term remissions were achieved.

Current prevention strategies use a combination of autoantibody marker testing and .beta.-cell function testing to identify individuals with 'prediabetes'. The most useful autoantibodies for prediabetes screening include islet cell autoantibodies, insulin autoantibodies, ***glutamic*** ***acid*** ***decarboxylase*** autoantibodies and IA-2 autoantibodies. Immunointervention techniques have focused on protecting .beta.-cells from oxidative damage and developing tolerance to B-cell ***autoantigens*** . Environmental manipulation may also be of benefit but its effectiveness is unproven. The pharmacist of the future may be involved in dispensing ***autoantigens*** , cytokines, anti-cytokine antibodies, anti-cytokine receptor antibodies, ***vaccines*** or viral vectors for gene therapy in the prevention of ***IDDM*** .

L12 ANSWER 10 OF 22 MEDLINE
ACCESSION NUMBER: 95261188 MEDLINE
DOCUMENT NUMBER: 95261188 PubMed ID: 7742651
TITLE: [Study on structural gene expression in human insulinoma]. Isslenovanie strukturnykh genov, ekspressiruiushchikhsia v insulinome cheloveka.
AUTHOR: Chekhranova M K; Shuvalova E R; Ilina E N; Pankov D Iu; Diabirova S B; Pankov Iu A
SOURCE: VESTNIK ROSSIISKOI AKADEMII MEDITSINSKIKH NAUK, ***(1994)*** (12) 17-9.
Journal code: BL9; 9215641. ISSN: 0869-6047.
PUB. COUNTRY: RUSSIA: Russian Federation
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199506
ENTRY DATE: Entered STN: 19950621
Last Updated on STN: 19950621
Entered Medline: 19950613
AB A human insulinoma cDNA library was constructed in the expression ***plasmid*** vector pUEX1. The clone pUEX1Ins12 was selected by means of hybridization with an insulin probe. It codes for full size amino acid sequence preproinsulin. The bacterial strain pUEX3Ins8 producing proinsulin as beta-galactosidase fusion protein was obtained for the use of recombinant protein as an antigen in an ELISA to detect serum antibodies in subjects with ***IDDM*** . Recombinant clones containing the middle, N- and C-terminal domains of the GAD65, the major ***autoantigen*** in ***IDDM*** , were constructed in pVEX1. These clones may become important tools to study the nature of ***GAD*** autoreactivity in ***IDDM*** . The clone pHICEO.9 was selected from the human insulinoma cDNA library by immunoscreening with total human insulinoma protein antibodies. This clone expresses the C-terminal fragment of human cholesterol esterase/lipase containing its antigenic determinant and can be used for blood lipase determination. Four clones containing cDNA inserts (0.47-1.42 kb) without any significant homologies to the known sequences in the Gene Bank were obtained by means of statistic selection.

L12 ANSWER 11 OF 22 MEDLINE
ACCESSION NUMBER: 94196075 MEDLINE
DOCUMENT NUMBER: 94196075 PubMed ID: 8146422
TITLE: A transgenic model for studying islet development.
AUTHOR: Gu D; Sarvetnick N
CORPORATE SOURCE: Department of Neuropharmacology, Scripps Research Institute, La Jolla, California 92037.
SOURCE: RECENT PROGRESS IN HORMONE RESEARCH, ***(1994)*** 49 161-5.
Journal code: R1D; 0404471. ISSN: 0079-9963.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199405
ENTRY DATE: Entered STN: 19940511
Last Updated on STN: 19940511
Entered Medline: 19940505
AB The regeneration of islet cells in a transgenic mouse strain harboring the interferon-gamma gene (IFN-gamma) linked to the insulin promoter ***DNA*** fragment (ins-IFN-gamma) is described. The regeneration follows the loss of islets by an immune response provoked by IFN-gamma and manifests in the proliferation of duct cells, the presence of progenitor cells, and the formation of buds and isletlike structure. All three types (A, B, and D) of four endocrine cells identified by immunolabeling are present. The progenitor cells express neuronal enzymes, tyrosine hydroxylase (TH) and ***glutamic*** ***acid*** ***decarboxylase*** (***GAD***), as revealed by specific antibodies.

The results indicate that the islet regeneration closely resembles the embryonic islet differentiation and serves as a model for studying islet development. The expression of neuronal enzymes by islet progenitor cells signifies yet unknown relationships to the nervous tissue. ***GAD*** , recognized as an ***autoantigen*** in insulin-dependent diabetes mellitus (***IDDM***) and stiff-man syndrome, may provide a clue to the mechanism of autoimmune disease.

L12 ANSWER 12 OF 22 MEDLINE
ACCESSION NUMBER: 94148157 MEDLINE
DOCUMENT NUMBER: 94148157 PubMed ID: 8314020
TITLE: Detection of GAD65 antibodies in diabetes and other autoimmune diseases using a simple radioligand assay.
AUTHOR: Petersen J S; Hejnaes K R; Moody A; Karlsen A E; Marshall M O; Hoier-Madsen M; Boel E; Michelsen B K; Dyrberg T
CORPORATE SOURCE: Hagedorn Research Institute, Gentofte, Denmark.
SOURCE: DIABETES, ***(1994 Mar)*** 43 (3) 459-67.
Journal code: E8X; 0372763. ISSN: 0012-1797.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199403
ENTRY DATE: Entered STN: 19940330
Last Updated on STN: 19940330
Entered Medline: 19940322
AB Autoantibodies to ***glutamic*** ***acid*** ***decarboxylase*** (***GAD***) are frequent at or before the onset of insulin-dependent diabetes mellitus (***IDDM***). We have developed a simple, reproducible, and quantitative immunoprecipitation radioligand assay using as antigen in vitro transcribed and translated [35S]methionine-labeled human islet GAD65. By using this assay, 77% (77 of 100) of serum samples from recent-onset ***IDDM*** patients were positive for GAD65 antibodies compared with 4% (4 of 100) of serum samples from healthy control subjects. In competition analysis with unlabeled purified recombinant human islet GAD65, binding to tracer was inhibited in 74% (74 of 100) of the GAD65-positive ***IDDM*** serum samples compared with 2% of the control samples. The levels of ***GAD*** antibodies expressed as an index value relative to a standard serum, analyzed with or without competition, were almost identical (r = 0.991). The intra- and interassay variations of a positive control serum sample were 2.9 and 7.6%, respectively (n = 4). The frequency of ***GAD*** antibodies was significantly higher with ***IDDM*** onset before the age of 30 (80%, 59 of 74) than after the age of 30 (48%, 10 of 21) ($P < 0.01$). The prevalence of islet cell antibodies showed a similar pattern relative to age at onset. Because simultaneous occurrences of multiple autoimmune phenomena are common, we analyzed sera from patients with other autoimmune diseases. The frequency of ***GAD*** antibodies in sera positive for ***DNA*** autoantibodies (8% [2 of 25] and 4% [1 of 25] in competition analysis) or rheuma factor autoantibodies [12% (4 of 35) and 3% (1 of 35) in competition analysis] was not different from that in control samples. In contrast, in sera positive for ribonucleoprotein antibodies the

frequency of ***GAD*** antibodies was significantly increased (73% [51
of 70] and 10% [7 of 70] in competition analysis [P < 0.025]). In conclusion, even large numbers of serum samples can now be tested for GAD65 antibodies in a relatively short time, allowing screening of individuals without a family history of ***IDDM*** for the presence of this marker.

L12 ANSWER 13 OF 22 MEDLINE
ACCESSION NUMBER: 92105395 MEDLINE
DOCUMENT NUMBER: 92105395 PubMed ID: 1370298
TITLE: Autoimmunity to two forms of glutamate decarboxylase in insulin-dependent diabetes mellitus.
AUTHOR: Kaufman D L; Erlander M G; Clare-Salzler M; Atkinson M A;
Maclaren N K; Tobin A J
CORPORATE SOURCE: Department of Psychiatry and Behavioral Sciences,
University of California Los Angeles 90024.
SOURCE: JOURNAL OF CLINICAL INVESTIGATION, ***(1992 Jan)*** 89
(1) 283-92.
Journal code: HS7; 7802877. ISSN: 0021-9738.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199202
ENTRY DATE: Entered STN: 19920302
Last Updated on STN: 19960129
Entered Medline: 19920210
AB Insulin-dependent diabetes mellitus (***IDDM***) is thought to result
from the autoimmune destruction of the insulin-producing beta cells of the pancreas. Years before ***IDDM*** symptoms appear, we can detect autoantibodies to one or both forms of glutamate decarboxylase (GAD65 and
GAD67), synthesized from their respective cDNAs in a bacterial expression
system. Individual ***IDDM*** sera show distinctive profiles of epitope recognition, suggesting different humoral immune responses. Although the level of ***GAD*** autoantibodies generally decline after ***IDDM*** onset, patients with ***IDDM*** -associated neuropathies
have high levels of antibodies to ***GAD*** , years after the appearance of clinical ***IDDM*** . We note a striking sequence similarity between the two GADs and Coxsackievirus, a virus that has been
associated with ***IDDM*** both in humans and in experimental animals.
This similarity suggests that molecular mimicry may play a role in the pathogenesis of ***IDDM*** .

L12 ANSWER 14 OF 22 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1998-414115 [35] WPIDS
DOC. NO. NON-CPI: N1998-322256
DOC. NO. CPI: C1998-125066
TITLE: New hybrid ***glutamic*** ***acid*** ***decarboxylase*** - useful for diagnosis and inhibition of insulin-dependent diabetes.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): CORNER, B; LAW, R; MACKAY, I R; ROWLEY, M J; TEOH, K;
ZIMMET, P Z; MACKAY, M J
PATENT ASSIGNEE(S): (MONT) MONTECH MEDICAL DEV PTY LTD; (ROND-N) RONDOLE PTY
LTD; (MONT-N) MONTECH MEDICAL DEV PTY LTD
COUNTRY COUNT: 83
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9831819	A1	19980723 (199835)*	EN	56	<--

RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA
PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
US UZ VN YU ZW

AU 9855439	A	19980807 (199901)	<--
ZA 9800436	A	19981230 (199907)	57 <--
EP 954587	A1	19991110 (199952)	EN

R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

NZ 336643	A	20000228 (200017)	
US 6165738	A	20001226 (200103)	
MX 9906713	A1	20000501 (200129)	
AU 733686	B	20010524 (200136)	
JP 2001509678	W	20010724 (200147)	58

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9831819	A1	WO 1998-AU25	19980121
AU 9855439	A	AU 1998-55439	19980121
ZA 9800436	A	ZA 1998-436	19980120
EP 954587	A1	EP 1998-900479	19980121
		WO 1998-AU25	19980121
NZ 336643	A	NZ 1998-336643	19980121
		WO 1998-AU25	19980121
US 6165738	A	WO 1998-AU25	19980121
		US 1999-341824	19990913
MX 9906713	A1	MX 1999-6713	19990719
AU 733686	B	AU 1998-55439	19980121
JP 2001509678	W	JP 1998-533409	19980121
		WO 1998-AU25	19980121

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9855439	A	Based on	WO 9831819
EP 954587	A1	Based on	WO 9831819
NZ 336643	A	Based on	WO 9831819
US 6165738	A	Based on	WO 9831819
AU 733686	B	Previous Publ. AU 9855439 Based on	WO 9831819
JP 2001509678	W	Based on	WO 9831819

PRIORITY APPLN. INFO: AU 1997-4685 19970121
AN 1998-414115 [35] WPIDS
AB WO 9831819 A UPAB: 19981001
New hybrid ***glutamic*** ***acid*** ***decarboxylase*** (***GAD***), (I), comprises the N-terminal part of the GAD67 isoform and
the central and C-terminal parts of the GAD67 isoform. Also new are: (1) isolated ***nucleic*** ***acid*** (II) encoding (I); (2) recombinant ***DNA*** cloning vehicles and vectors containing (II); and (3) host cells containing (II).
USE - Cells of (3) are used to produce (I). (I) is used (i) to detect autoantibodies against ***GAD*** , specifically for diagnosing insulin-dependent diabetes mellitus (***IDDM***) and (ii) to inhibit development of ***IDDM*** in a presymptomatic subject (i.e. to establish normal immune tolerance to ***autoantigenic*** pancreatic cell components), in human and veterinary medicine.
(I) are administered mucosally, particularly orally. No dose is suggested.
ADVANTAGE - Replacement of the very hydrophobic N-terminus of GAD67
with the more hydrophilic sequence from GAD65 produces a hybrid that is better suited to recombinant expression. (I) is expressed at high level in yeast (and is easily purified by affinity chromatography) in a form that is immunoreactive with ***IDDM*** sera. Recombinant (I) avoids dangers
associated with material extracted from mammalian sources.
Dwg.5/8

L12 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:749626 HCAPLUS
DOCUMENT NUMBER: 130:80101
TITLE: ***DNA*** ***vaccination*** with ***glutamic*** ***acid*** ***decarboxylase***

(***GAD***) generates a strong humoral immune response in BALB/c, C57BL/6, and in diabetes-prone ***NOD*** mice

AUTHOR(S): Wiest-Ladenburger, U.; Fortnagel, A.; Richter, W.; Reimann, J.; Boehm, Bernhard O.

CORPORATE SOURCE: Department Internal Medicine I, University Ulm, Ulm, D-89070, Germany

SOURCE: Hormone and Metabolic Research (***1998***), 30(10), 605-609
CODEN: HMMRA2; ISSN: 0018-5043

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The technique of ***DNA*** -based ***vaccination*** was used to generate a T-cell-dependent antibody response to ***glutamic*** ***acid*** ***decarboxylase*** (***GAD***) in BALB/c, C57BL/6, and non-obese diabetic (***NOD***) mice. Plasmids were constructed in which the expression of the rat GAD65 (rGAD65) or the rat GAD67 (rGAD67) gene was driven by the immediate early region promoter of the human cytomegalovirus (pCMV). This "naked" ***plasmid*** ***DNA*** was then injected into the regenerating muscles of the studied mice. In the ***vaccinated*** animals, antibody responses to GAD65 or to GAD67 were induced. Epitope recognition of ***GAD*** was studied by protein footprinting, a technique which makes use of a limited proteolysis of antibody-bound antigen. Different epitope recognition patterns were found, corresponding to strain-specific patterns. Mild trypsin treatment generated 50 kDa, 46 kDa, 40 kDa, 30 kDa, and 21 kDa proteolytic fragments. In ***NOD*** mice, 50, 46, and 40 kDa bands were the most prominent signals. In non-diabetes prone BALB/c mice, a faint 40 kDa band appeared suggesting a rather weak protection of ***GAD*** from tryptic lysis. The pattern obsd. in C57BL/6 mice was more comparable to the ***NOD*** mice pattern with prominent 40 kDa and 30 kDa signals and a faint 21 kDa fragment. Diabetes incidence was unchanged in ***NOD*** mice, and no diabetes was obsd. in C57BL/6 and BALB/c mice, resp. Thus, genetic immunization is a suitable novel tool to stimulate and manipulate an immune response against the diabetes-assocd. protein ***glutamic*** ***acid*** ***decarboxylase*** . The results indicate that, by genetic ***vaccination*** , distinct B-cell epitopes were generated in the various studied mouse strains.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:501459 HCAPLUS

DOCUMENT NUMBER: 127:134682

TITLE: Insulin-dependent diabetes mellitus-associated ***autoantigen*** , islet cell antigen-related phosphoprotein phosphatase, and ***IDDM*** diagnosis

INVENTOR(S): Pallen, Catherine Jane; Cui, Lin; Yu, Wei-Ping

PATENT ASSIGNEE(S): National University of Singapore, Singapore; Pallen, Catherine Jane; Cui, Lin; Yu, Wei-Ping

SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9722694	A2	19970626	WO 1996-CA867	19961220 <--
WO 9722694	A3	19970814		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9710909	A1	19970714	AU 1997-10909	19961220 <--
EP 874901	A2	19981104	EP 1996-941561	19961220 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: GB 1995-26036 19951220
GB 1996-5710 19960319
GB 1996-20265 19960927
WO 1996-CA867 19961220

AB The present invention relates to a ***nucleic*** ***acid*** encoding a polypeptide that has the properties of an insulin-dependent diabetes mellitus (***IDDM***)-assocd. ***autoantigen*** . This ***autoantigen*** is termed IAR for islet cell antigen-related phosphoprotein phosphatase. The cDNA sequence and protein sequence are presented. The invention also comprises diagnostic methods with employ the ***autoantigen*** or nucleic acids encoding it.

L12 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:181157 HCAPLUS

DOCUMENT NUMBER: 126:170371

TITLE: Method for detecting or monitoring the effectiveness of treatment of T cell mediated diseases

INVENTOR(S): Cohen, Irun R.; Elias, Dana

PATENT ASSIGNEE(S): Yeda Research and Development Co. Ltd., Israel; Cohen, Irun R.; Elias, Dana

SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702052	A1	19970123	WO 1996-US11374	19960702 <--

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

AU 9664543	A1	19970205	AU 1996-64543	19960702 <--
EP 847281	A1	19980617	EP 1996-923689	19960702 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI

JP 2001520740	T2	20011030	JP 1997-505318	19960702
US 6309847	B1	20011030	US 1998-973782	19980722

PRIORITY APPLN. INFO.: IL 1995-114459 A 19950705
WO 1996-US11374 W 19960702

AB It has been discovered that treatment of an ***IDDM*** model with the p277 auto-antigen carrier induces a shift from a TH1 T cell response to a TH2 T cell response. The efficacy of proposed ***vaccines*** for any T cell mediated disease can be detected or monitored by measuring for such a TH1 .fwdarw. TH2 T cell response shift. P277 peptide of hsp60, p34 peptide of ***glutamic*** ***acid*** ***decarboxylase*** and MT-p278 peptide of Mycobacterial hsp60 were synthesized and

administered
to induce specific redn. of spontaneous T cell proliferative responses. P277 therapy induced a shift in the antibody isotype from IgG2a to IgG1 and IgG2b and a switch from the prodn. of interleukin 2 and interferon .gamma. to interleukin 4 and interleukin 10.

L12 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:632213 HCAPLUS
DOCUMENT NUMBER: 123:28599
TITLE: A cDNA for the 64-kilodalton ***glutamic*** ***acid*** ***decarboxylase*** associated with autoimmune disease and its uses
INVENTOR(S): Tobin, Allan J.; Erlander, Mark G.; Kaufman, Daniel L.; Clare-Salzler, Michael J.
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9507992	A2	19950323	WO 1994-US9478	19940824 <--
WO 9507992	A3	19950622		

W: AU, CA, JP, KR
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

US 5674978	A	19971007	US 1993-123859	19930917 <--
AU 9479201	A1	19950403	AU 1994-79201	19940824 <--
AU 697058	B2	19980924		
EP 719340	A1	19960703	EP 1994-927940	19940824 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

JP 09503387	T2	19970408	JP 1995-509191	19940824 <--

PRIORITY APPLN. INFO.: US 1993-123859 A 19930917
US 1990-586536 A2 19900921
US 1991-716909 B2 19910618
WO 1994-US9478 W 19940824
AB A gene encoding the GAD65 ***glutamic*** ***acid*** ***decarboxylase*** that is a significant ***autoantigen*** in the autoimmune disease complication of diabetes mellitus is cloned for use in the manuf. of the protein for diagnosis, prophylaxis and therapy of the disease. A cDNA for the rat hippocampus GAD65 was cloned by screening a
cDNA bank in .lambda.ZAP with a probe from the cat GAD67 gene and expressed in Escherichia coli. The identity of the enzyme with the ***autoantigen*** was demonstrated immunochem. The rat GAD65 and GAD67
isoenzymes were shown to be encoded by sep. genes. The two enzymes showed
slightly different tissue distributions with GAD65 more common in type II Golgi neurons than GAD67. The utility of antibodies to the enzyme as a diagnostic marker was demonstrated. GAD65 used as an antigen was found to
stimulate a proliferation of T-cells in ***NOD*** mice. Attempts to induce immune tolerance and the identification of epitopes of the protein are described.

L12 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:231816 HCAPLUS
DOCUMENT NUMBER: 118:231816
TITLE: Characterization of a linear epitope within the human pancreatic 64-kDa ***glutamic*** ***acid*** ***decarboxylase*** and its autoimmune recognition by sera from insulin-dependent diabetes mellitus patients
AUTHOR(S): Mauch, Ludwig; Abney, Charles C.; Berg, Heike; Scherbaum, Werner A.; Liedvogel, Bodo; Northemann, Wolfgang
CORPORATE SOURCE: Dep. Mol. Biol., ELIAS Entwicklungslabor, Freiburg, W-7800, Germany
SOURCE: Eur. J. Biochem. (***1993***), 212(2), 597-603
CODEN: EJBCAI; ISSN: 0014-2956
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A 2.0-kb cDNA coding for the full-length-64-kDa ***glutamic*** ***acid*** ***decarboxylase*** (GAD64) was isolated from a pancreatic carcinoma cDNA library by ***oligonucleotide*** screening,
PCR amplification and subsequently characterized by sequence anal. Five overlapping fragments of GAD64 cDNA were constructed into the vector pH6EX3, allowing the highly efficient expression of corresponding fusion proteins with a histidine hexapeptide as an affinity ligand at their N-termini in Escherichia coli. The recombinant GAD64 fragments were analyzed by Western blotting using sera from patients with early onset of insulin-dependent diabetes mellitus (***IDDM***). At least 20% of the
patients with an onset of ***IDDM*** had developed autoantibodies which specifically recognized a linear antigenic epitope within the GAD64.
With a selected ***IDDM*** serum, an antigenic epitope was localized in a region of 31 amino acids located at the C-terminus of GAD64, using epitope mapping techniques, and it was characterized. The possibility of using recombinant GAD64 for the development of an immunoassay for a predictive diagnosis of ***IDDM*** is discussed.

L12 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:164734 HCAPLUS
DOCUMENT NUMBER: 118:164734
TITLE: Cloning and expression of human islet ***glutamic*** ***acid*** ***decarboxylase*** ***autoantigen***
INVENTOR(S): Lernmark, Ake; Karlsen, Allen E.; Grubin, Catherine E.; Hagopian, William; O'Hara, Patrick J.; Foster, Donald C.
PATENT ASSIGNEE(S): Zymogenetics, Inc., USA; University of Washington
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9220811	A2	19921126	WO 1992-US4079	19920514 <--
WO 9220811	A3	19930121		

W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG

CA 2103159	AA	19921116	CA 1992-2103159	19920514 <--
AU 9219976	A1	19921230	AU 1992-19976	19920514 <--
AU 671589	B2	19960905		
EP 585356	A1	19940309	EP 1992-912153	19920514 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE

JP 06508030	T2	19940914	JP 1992-500208	19920514 <--
US 5792620	A	19980811	US 1993-108145	19930817 <--
US 6025176	A	20000215	US 1995-453040	19950530

PRIORITY APPLN. INFO.: US 1991-702162 19910515
WO 1992-US4079 19920514
US 1992-883492 19920515
US 1993-108145 19930817
AB ***DNA*** for human pancreatic islet cell ***glutamic*** ***acid*** ***decarboxylase*** (I), an ***autoantigen*** involved in the development of insulin-dependent diabetes mellitus (***IDDM***), is cloned, sequenced, and expressed by recombinant means.
Recombinant I polypeptides, and antibodies specific to them, are useful in diagnosis and treatment, including use in extracorporeal immunoadsorptive
therapy for removal of autoantibodies to I and the induction of immune tolerance by administering a recombinant I polypeptide that specifically binds I receptors on immature T- or B-cells. Recombinant I, labeled with methionine-15S during in vitro translation, was used in an immunopptn. test with protein A-Sepharose to detect autoantibodies to I in serum from children with ***IDDM*** .

L12 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:37470 HCAPLUS

DOCUMENT NUMBER: 118:37470
TITLE: A method for the diagnosis and treatment of ***glutamic*** ***acid*** ***decarboxylase*** ***autoantigen*** -associated diseases
INVENTOR(S): Harrison, Leonard; Honeyman, Margo; Cram, David; De Aizpurua, Henry
PATENT ASSIGNEE(S): Amrad Corp. Ltd., Australia
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9214485	A1	19920903	WO 1992-AU63	19920221 <--
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
CA 2104225	AA	19920823	CA 1992-2104225	19920221 <--
AU 9212748	A1	19920915	AU 1992-12748	19920221 <--
AU 659133	B2	19950511		
EP 572478	A1	19931208	EP 1992-905170	19920221 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06505385	T2	19940623	JP 1992-5047	19920221 <--
JP 3027190	B2	20000327		
US 5837812	A	19981117	US 1994-308952	19940920 <--
US 6211352	B1	20010403	US 1998-124141	19980729

PRIORITY APPLN. INFO.: AU 1991-4773 A 19910222
AU 1991-8620 A 19910927
US 1992-839805 B1 19920221
WO 1992-AU63 A 19920221
US 1994-308952 A1 19940920

AB Nucleic acids encoding isoforms of ***glutamic*** ***acid*** ***decarboxylase*** (I), synthetic polypeptides contg. all or parts of I, and use of the polypeptides in diagnostic tests for insulin dependent diabetes mellitus (***IDDM***) and other diseases in which I is an ***autoantigen*** are disclosed as are methods of treating such diseases. CDNA for I from human brain and pancreatic islet and from mouse brain were isolated, cloned, and sequenced. Recombinant I polypeptides were used in ELISAs to detect antibodies to I in blood serum samples.

L12 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:212840 HCAPLUS
DOCUMENT NUMBER: 116:212840
TITLE: Methods for the diagnosis and treatment of diabetes
INVENTOR(S): Baekkeskov, Steinunn; Aanstoot, Henk Jan; Decamilli, Pietro; Folli, Franco; Solimena, Michele
PATENT ASSIGNEE(S): University of California, Oakland, USA; Yale University
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9204632	A1	19920319	WO 1991-US6438	19910906 <--
W: AU, CA, FI, JP, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9187219	A1	19920330	AU 1991-87219	19910906 <--
EP 547164	A1	19930623	EP 1991-918181	19910906 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 06502916	T2	19940331	JP 1991-516703	19910906 <--
JP 2727377	B2	19980311		
US 5512447	A	19960430	US 1993-174550	19931228 <--

PRIORITY APPLN. INFO.: US 1990-579007 A 19900907
US 1991-756207 B1 19910906
WO 1991-US6438 A 19910906

AB Assays for the detection of diabetes rely on exposing patient serum samples to purified ligand capable of binding autoantibodies specific for a 64 kDa ***autoantigen*** present on pancreatic .beta.-cells. The purified ligand is usually purified ***glutamic*** ***acid*** ***decarboxylase*** (***GAD***) or a fragment or analog thereof. Preferably, the assays will detect the presence of antibodies to both lower-mol.-wt. and higher-mol.-wt. ***GAD*** since diabetic and prediabetic status may be assocd. with only 1 of these 2 forms. The assays can be performed using conventional protocols (RIA, ELISA, etc.). Methods for treating diabetes comprise administration of pharmaceutical compns. including the purified ligand, esp. when coupled to an Ig or lymphoid cell to induce tolerance. Alternatively, tolerance may be induced by administering attenuated helper T-cells or isolated T-cell receptors, where the helper T-cells have been isolated based on their reactivity with ***GAD*** or equiv. ligand. Thus, autoantibodies to ***GAD*** immunopptd. the 64 kDa ***autoantigen*** from islets, and autoantibodies to the 64 kDa protein immunopptd. ***GAD*** from brain and islets. The 64 kDa protein had ***GAD*** activity. ***GAD*** antibodies in stiff-man syndrome patients were generally of a higher titer and distinct epitope recognition, compared to ***GAD*** antibodies in patients with insulin-dependent diabetes mellitus (***IDDM***). ***IDDM*** patient autoantibodies recognized both mol. wt. forms of pancreatic ***GAD*** . Cloning of the high-mol.-wt. ***GAD*** is described.

07/336672

1. Document ID: US 6207389 B1

L3: Entry 1 of 2

File: USPT

Mar 27, 2001

US-PAT-NO: 6207389
DOCUMENT-IDENTIFIER: US 6207389 B1
TITLE: Methods of controlling T lymphocyte mediated immune responses
DATE-ISSUED: March 27, 2001

US-CL-CURRENT: 435/7.1; 435/6, 530/300, 530/327, 530/350

APPL-NO: 8/ 477928
DATE FILED: June 7, 1995

PARENT-CASE:
REFERENCE TO RELATED APPLICATIONS This application is a continuation-in-part of U.S. patent application Ser. No. 08/237,363, filed May 3, 1994 and is a cip of PCT/CA00264 filed May 3, 1995.

IN: Dosch; Hans Michael

AB: Methods and compositions are provided for preventing the development of a T cell mediated autoimmune disease such as Type I diabetes, in which susceptible subjects have T cells sensitized to a disease-related antigen. Subjects are treated by administration of the antigen or fragments thereof to prevent the expansion of the population of sensitized T cells. Alternatively, subjects are treated by administration of immunogenic compositions comprising a mimicry antigen or fragments thereof.

L3: Entry 1 of 2

File: USPT

Mar 27, 2001

DOCUMENT-IDENTIFIER: US 6207389 B1
TITLE: Methods of controlling T lymphocyte mediated immune responses

DEPR:
A second set of mice received ovalbumin as antigen. Vigorous p69-specific antibody and T cell responses were observed in immunized NOD mice but not in C57/B6 or SJL strains. Notably, the NOD responses were of the same order of magnitude as responses to a bona fide non-self antigen, ovalbumin. Both control strains of mice generated comparable responses to ovalbumin. Thus, NOD mice possess and can readily recruit sizable B- and T cell repertoires recognizing the p69 self antigen, a property not found in mice that do not develop autoimmune diabetes.

2. Document ID: EP 1071452 A1, WO 9952547 A1, AU 9935588 A

L3: Entry 2 of 2

File: DWPI

Jan 31, 2001

DERWENT-ACC-NO: 1999-620288
DERWENT-WEEK: 200108

TITLE: Enhancing mammalian immune response, useful for treating individuals suffering from an immuno-compromised disease or disorder e.g. AIDS and/or for use with chemotherapy recipients

PRIORITY-DATA: 1998US-0081638 (April 13, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 1071452 A1	January 31, 2001	E	000	A61K039/04
WO 9952547 A1	October 21, 1999	E	049	A61K039/04
AU 9935588 A	November 1, 1999	N/A	000	A61K039/04

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
EP 1071452A1	April 13, 1999	1999EP-0917473	N/A
EP 1071452A1	April 13, 1999	1999WO-US08112	N/A
EP 1071452A1		WO 9952547	Based on
WO 9952547A1	April 13, 1999	1999WO-US08112	N/A
AU 9935588A	April 13, 1999	1999AU-0035588	N/A
AU 9935588A		WO 9952547	Based on

INT-CL (IPC): A61K 39/00; A61K 39/002; A61K 39/04; A61K 39/39; A61K 39/00; A61K 39/002; A61K 39/04; A61K 39/39; A61K 39/39; A61K 39/04; A61K 39/39; A61K 39/002; A61K 39/39; A61K 39/00

IN: BRENNER, M B, DASCHER, C C, HIROMATSU, K, PORCELLI, S A

AB: NOVELTY - A method of enhancing an immune response in a mammal to at least one CD1 antigen is new and comprises co-administering to the mammal an effective amount of at least one CD1 antigen and at least one T cell stimulating compound.,

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:, (1) a method of vaccinating a mammal against at least one CD1 antigen comprising

administering to the mammal an effective amount of at least one CD1 antigen and at least one adjuvant;, (2) a method of stimulating a CD1-restricted immune response in a mammal comprising administering to the mammal a composition comprising at least one adjuvant and at least one lipid antigen where the antigen elicits a CD1-restricted immune response;, (3) an immunogenic composition (I), comprising:, (a) at least one T cell stimulating compound; and, (b) at least one CD1 antigen, where the CD1 antigen elicits a CD1-restricted immune response;, (4) a method for eliciting an immunogenic response in a mammal comprising administering (I);, (5) a vaccine composition (II) comprising at least one adjuvant and at least one lipid antigen where the lipid antigen elicits a CD1-restricted immune response;, (6) a method for vaccinating a mammal comprising administering (II); and, (7) a kit comprising at least one T-cell stimulating compound and at least one CD1 antigen where the CD1 antigen elicits a CD1-restricted immune response., ACTIVITY - Anti-parasitic; antibacterial; immune stimulant., MECHANISM OF ACTION - The method elicits at least one immunological parameter e.g. antibody response the antigen, cytotoxic T-lymphocyte response, T-cell proliferation, helper T-cell response or a T-cell modulated cytokine response., USE - The method is useful for enhancing or boosting the immune response of an individual who has a immuno-compromised disease, disorder or condition (e.g. AIDS or chemotherapy recipient). The method is also useful for eliciting or boosting an immune response for at least one bacterial infection (e.g. Mycobacteria genus, Hemophilus genus, Streptococcus genus, Staphylococcus genus and Chlamydia) and/or at least one parasitic infection (e.g. Plasmodium or Trypanosoma genus). (All claimed). The CD1 antigen can also be a tumor associated or derived antigen that is involved in diseases e.g. cancer (e.g. melanoma, breast cancer, prostate cancer, and colo-rectal cancer) or a self antigen that is involved in autoimmune diseases (e.g. diabetes, Lupus, rheumatoid arthritis)., ADVANTAGE - The method enhances the immune response for vaccines without eliciting a sufficient protective immune response in a host.

L3: Entry 2 of 2

File: DWPI

Jan 31, 2001

DERWENT-ACC-NO: 1999-620288
DERWENT-WEEK: 200108

TITLE: Enhancing mammalian immune response, useful for treating individuals suffering from an immuno-compromised disease or disorder e.g. AIDS and/or for use with chemotherapy recipients

ABTX:

U SE - The method is useful for enhancing or boosting the immune response of an individual who has a immuno-compromised disease, disorder or condition (e.g. AIDS or chemotherapy recipient). The method is also useful for eliciting or boosting an immune response for at least one bacterial infection (e.g. Mycobacteria genus, Hemophilus genus, Streptococcus genus, Staphylococcus genus and Chlamydia) and/or at least one parasitic infection (e.g. Plasmodium or Trypanosoma genus). (All claimed). The CD1 antigen can also be a tumor associated or derived antigen that is involved in diseases e.g. cancer (e.g. melanoma, breast cancer, prostate cancer, and colo-rectal cancer) or a self antigen that is involved in autoimmune diseases (e.g. diabetes, Lupus, rheumatoid arthritis).

09/386672
A448

1. Document ID: US 6068844 A

L5: Entry 1 of 7

File: USPT

May 30, 2000

US-PAT-NO: 6068844
DOCUMENT-IDENTIFIER: US 6068844 A
TITLE: Increased resistance to stroke by developing immunologic tolerance to myelin or components thereof
DATE-ISSUED: May 30, 2000

US-CL-CURRENT: 424/184.1; 424/810, 514/12, 514/2, 530/350

APPL-NO: 8/ 994293
DATE FILED: December 19, 1997

IN: Becker; Kyra J., Hallenbeck; John M., McCarron; Richard M.

AB: The present invention relates to a method of inducing oral tolerance to ischemic injury which has the objective of minimizing the severity and size of injured regions in the brain that arise as a result of ischemia. The method responds rapidly to the onset of infarction, with treatment that is short in duration. The procedure is specifically focused on the injured area of the infarct by virtue of being targeted immunologically to the ischemic site. The method therefore avoids the possibility of inducing systemic side effects affecting other organs of the patient. The present invention involves administering myelin or a component thereof such as myelin basic protein or proteolipid protein to a subject either orally or by inhalation. The amount administered and the duration of the treatment are effective to minimize the size and severity of the infarct in the brain of the subject. The method is intended for acute conditions related either to an actual recent cerebral ischemic event or to a potential ischemic event that might arise as a result of medical or surgical treatment planned for the subject.

2. Document ID: US 5958416 A

L5: Entry 2 of 7

File: USPT

Sep 28, 1999

US-PAT-NO: 5958416
DOCUMENT-IDENTIFIER: US 5958416 A
TITLE: Heat shock protein peptides and methods for modulating autoimmune central nervous system disease
DATE-ISSUED: September 28, 1999

US-CL-CURRENT: 424/190.1; 424/184.1, 514/885, 514/903, 530/300, 530/350

APPL-NO: 8/ 447154
DATE FILED: May 23, 1995

PARENT-CASE:
This application is a continuation-in-part of application Ser. No. 08/368,834 filed Feb. 16, 1994.

IN: Birnbaum; Gary, Kotilinek; Linda A., Braun; Peter Erich

AB: The invention provides for peptides and methods of using peptides to block or inhibit a pathogenic autoimmune response to central nervous system components. One class of peptides are antigens derived from mycobacterial heat shock proteins and may immunologically cross-react with or are homologous to myelin components. The peptides can also be derived from myelin components such as 2',3' cyclic nucleotide phosphodiesterase and immunologically cross-react with and/or are homologous to mycobacterial heat shock proteins. A method of the invention involves administering a pharmaceutical composition including at least one peptide to an animal in an amount effective to block or inhibit a pathogenic autoimmune response to central nervous system components. The peptides are useful for the prevention, and treatment of autoimmune inflammatory central nervous system disease.

3. Document ID: US 5935577 A

L5: Entry 3 of 7

File: USPT

Aug 10, 1999

US-PAT-NO: 5935577
DOCUMENT-IDENTIFIER: US 5935577 A
TITLE: Treatment of autoimmune disease using tolerization in combination with methotrexate
DATE-ISSUED: August 10, 1999

US-CL-CURRENT: 424/184.1; 424/810, 514/2, 514/21, 514/249, 514/3, 514/4, 514/826, 514/866, 514/885, 514/903

APPL-NO: 9/ 012806
DATE FILED: January 23, 1998

PARENT-CASE:
This application claims priority pursuant to 35 U.S.C. .sctn. 119 from Provisional Patent Application Serial No. 60/036,722 filed Jan. 24, 1997, the disclosure of which is hereby incorporated in its entirety.

IN: Weiner; Howard L., Al-Sabbagh; Ahmad, Nelson; Patricia A.

AB: A combination of a mucosally administrable bystander antigen and an orally, enterally, or parenterally administrable methotrexate is employed to make a pharmaceutical formulation and to treat or prevent autoimmune disease. The amounts of bystander antigen and methotrexate are effective in combination to suppress autoimmune response associated with the autoimmune disease

4. Document ID: US 5874405 A

L5: Entry 4 of 7

File: USPT

Feb 23, 1999

US-PAT-NO: 5874405
DOCUMENT-IDENTIFIER: US 5874405 A
TITLE: Heat shock protein peptides that share sequences with cyclic nucleotide phosphodiesterase and methods for modulating autoimmune central nervous system disease
DATE-ISSUED: February 23, 1999

US-CL-CURRENT: 514/15; 514/12, 514/13, 514/14

APPL-NO: 8/ 368834
DATE FILED: December 16, 1994

IN: Birnbaum; Gary, Kotilinek; Linda K., Braun; Peter Erich

AB: The invention provides for peptides and methods of using peptides to block or inhibit a pathogenic autoimmune response to central nervous system components. The peptides are antigens derived from mycobacterial heat shock proteins and that immunologically crossreact with or are homologous to myelin components. The peptides can also be derived from myelin components such as 2',3' cyclic nucleotide phosphodiesterase and that immunologically crossreact and/or are homologous to mycobacterial heat shock proteins. A method of the invention involves administering a pharmaceutical composition including at least one peptide to an animal in an amount effective to block or inhibit a pathogenic autoimmune response to central nervous system components. The peptides are useful for the prevention, and treatment of autoimmune inflammatory central nervous system disease.

5. Document ID: US 5874531 A

L5: Entry 5 of 7

File: USPT

Feb 23, 1999

US-PAT-NO: 5874531
DOCUMENT-IDENTIFIER: US 5874531 A
TITLE: Identification of self and non-self antigens implicated autoimmune disease
DATE-ISSUED: February 23, 1999

US-CL-CURRENT: 530/326; 424/184.1, 424/185.1

APPL-NO: 8/ 400796
DATE FILED: March 7, 1995

IN: Strominger; Jack L., Wucherpfennig; Kai W.

AB: The present invention provides isolated peptides relating to the autoimmune diseases pemphigus vulgaris and multiple sclerosis. The peptides relating to pemphigus vulgaris are self epitopes and those relating to multiple sclerosis are foreign antigens derived from human pathogens which are implicated in the aetiology and remissions of the disease. Pharamaceutical preparations for tolerizing and/or immunizing individuals are provided as well as methods relating thereto. Methods are provided for identifying other self and non-self epitopes involved in human autoimmune disease and similar pharamaceutical preparations and methods of use for these epitopes are also provided.

6. Document ID: WO 9829109 A1

L5: Entry 6 of 7

File: EPAB

Jul 9, 1998

PUB-NO: WO009829109A1
DOCUMENT-IDENTIFIER: WO 9829109 A1
TITLE: METHODS AND COMPOSITIONS FOR IDENTIFICATION OF AUTOANTIGENS

PUBN-DATE: July 9, 1998

INT-CL (IPC): A61K 31/00; A61K 39/00; A61K 38/00; A61K 38/17; G01N 33/53; G01N 33/564; G01N 37/00; C07K 14/00; C07K 14/435; C07K 16/18; C07K 1/107

APPL-NO: US09724100
APPL-DATE: December 30, 1997
PRIORITY-DATA: US03409896P (December 30, 1996)

IN: ROSEN, ANTONY, CASCIOLA-ROSEN, LIVIA

AB: Autoantigens with immunocryptic sites may be cleaved at particular sites in the presence of metals such as iron or copper and reactive oxygen species to produce antigenic protein fragments which are useful in diagnosing autoimmune diseases. Substances that interfere with fragmentation process may be used to treat autoimmune diseases and the fragments may be used to tolerize patients. Non-enzymatic proteolysis according to the invention has wide applicability as a biochemical tool.

7. Document ID: EP 286447 A2

L5: Entry 7 of 7

File: EPAB

Oct 12, 1988

PUB-NO: EP000286447A2
DOCUMENT-IDENTIFIER: EP 286447 A2
TITLE: Method and agents relating to prophylactic treatment of autoimmune diseases.

PUBN-DATE: October 12, 1988

INT-CL (IPC): A61K 37/02; A61K 39/00
EUR-CL (EPC): C07K014/705

APPL-NO: EP88303198
APPL-DATE: April 11, 1988
PRIORITY-DATA: US03637287A (April 9, 1987)

IN: TODD, JOHN A DEPT OF MEDICAL MI, BELL, JOHN I THE NUFFIELD, ACHA-ORBEA, HANS,
MCDEVITT, HUGH O DEPT OF MEDICA

AB: Autoimmune diseases are the result of an immune response directed against a self antigen. Susceptibility to an autoimmune disease is conferred by antigen encoded within an allele of the MHC. A potentially susceptible individual is protected from developing the autoimmune disease by an antigen encoded within a second allele of the MHC. Individuals who have the allele for susceptibility, and lack the allele for protection are highly susceptible to manifestation of the autoimmune disease. The present invention provides a method for prophylactically treating individuals who are highly susceptible to an autoimmune disease. In the method, the individuals are tolerized by administration of a protective antigen encoded within the protective allele. As part of the invention, the sequences encoding the protective antigen(s), as well as the antigen(s) conferred susceptibility, are elucidated. The elucidation of these sequences allows for the synthesis of the antigens conferring these traits. These antigens may be used pharmacologically; in addition, they may be used to raise monoclonal antibodies. Monoclonal antibodies to these antigens are useful in diagnosis of susceptibility, and in elucidating the mechanisms by which antigens control the manifestation of the autoimmune disease. In addition, the sequence data allows the synthesis of nucleotide probes which are useful in diagnosis of susceptibility to the autoimmune disease.

09/336672
ATH 5

Search Results - Record(s) 1 through 48 of 48 returned.

1. Document ID: US 5986059 A
Entry 1 of 48

File: USPT

Nov 16, 1999

US-PAT-NO: 5986059
DOCUMENT-IDENTIFIER: US 5986059 A

TITLE: T-cell selective interleukin-4 agonists

DATE-ISSUED: November 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shanafelt; Armen B.	Moraga	CA	N/A	N/A
Greve; Jeffrey	Berkeley	CA	N/A	N/A
Gundel; Robert	Walnut Creek	CA	N/A	N/A

US-CL-CURRENT: 530/351; 424/85.2, 930/141

ABSTRACT:

The invention is directed to human IL-4 muteins numbered in accordance with wild-type IL-4 having T cell activating activity, but having reduced endothelial cell activating activity. In particular, the invention is related to human IL-4 muteins wherein the surface-exposed residues of the D helix of the wild-type IL-4 are mutated whereby the resulting mutein causes T cell proliferation, and causes reduced IL-6 secretion from HUVECs, relative to wild-type IL-4. This invention realizes a less toxic IL-4 mutant that allows greater therapeutic use of this interleukin. Further, the invention is directed to IL-4 muteins having single, double and triple mutations represented by the designators R121A, R121D, R121E, R121F, R121H, R121I, R121K, R121N, R121P, R121T, R121W; Y124A, Y124Q, Y124R, Y124S, Y124T; Y124A/S125A, T13D/R121E; and R121T/E122F/Y124Q, when numbered in accordance with wild type IL-4 (His=1). The invention also includes polynucleotides coding for the muteins of the invention, vectors containing the polynucleotides, transformed host cells, pharmaceutical compositions comprising the muteins, and therapeutic methods of treatment.
11 Claims, 21 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 14

2. Document ID: US 5959074 A
Entry 2 of 48

File: USPT

Sep 28, 1999

US-PAT-NO: 5959074
DOCUMENT-IDENTIFIER: US 5959074 A

TITLE: Products and processes for regulation of gene recombination

DATE-ISSUED: September 28, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dreyfus; David H.	Denver	CO	N/A	N/A
Gelfand; Erwin W.	Englewood	CO	N/A	N/A

US-CL-CURRENT: 530/300; 530/324

ABSTRACT:

This invention generally relates to a novel recombinogenic motif having transposase activities that is important to the regulation and function of Herpes virus replication, V(D)J recombination, and immunoglobulin class switching. The present invention also relates to a site-specific DNA binding region for V(D)J and V(D)J-like recombination signals. Disclosed are identifying characteristics of such motifs as well as methods for identifying the motifs.
2 Claims, 3 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

3. Document ID: US 5955595 A
Entry 3 of 48

File: USPT

Sep 21, 1999

US-PAT-NO: 5955595
DOCUMENT-IDENTIFIER: US 5955595 A

TITLE: Cell death regulators

DATE-ISSUED: September 21, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Korsmeyer; Stanley J.	St. Louis	MO	N/A	N/A

US-CL-CURRENT: 536/23.5; 435/252.3, 435/254.11, 435/320.1, 435/325, 536/24.3, 536/24.31

ABSTRACT:

A Bcl-2 associated protein (Bax) and uses thereof.
6 Claims, 42 Drawing figures

Exemplary Claim Number: 1
Number of Drawing Sheets: 25

4. Document ID: US 5948767 A
Entry 4 of 48
File: USPT
Sep 7, 1999

US-PAT-NO: 5948767
DOCUMENT-IDENTIFIER: US 5948767 A

TITLE: Cationic amphiphile/DNA complexes

DATE-ISSUED: September 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Scheule; Ronald K.	Hopkinton	MA	N/A	N/A
Bagley; Rebecca G.	Framingham	MA	N/A	N/A
Eastman; Simon J.	Hudson	MA	N/A	N/A
Cheng; Seng H.	Wellesley	MA	N/A	N/A
Marshall; John	Hopedaze	MA	N/A	N/A
Yew; Nelson S.	West Upton	MA	N/A	N/A
Harris; David J.	Lexington	MA	N/A	N/A
Lee; Edward R.	Natick	MA	N/A	N/A
Siegel; Craig S.	Woburn	MA	N/A	N/A
Chang; Chau-Dung	Lexington	MA	N/A	N/A
Hubbard; S. Catherine	Belmont	MA	N/A	N/A

US-CL-CURRENT: 514/44; 435/320.1, 435/325, 435/455, 435/458

ABSTRACT:

Novel cationic amphiphiles are provided that facilitate transport of biologically active (therapeutic) molecules into cells. The amphiphiles contain lipophilic groups derived from steroids, from mono or dialkylamines, or from alkyl or acyl groups; and cationic groups, protonatable at physiological pH, derived from amines, alkylamines or polyalkylamines. There are provided also therapeutic compositions prepared typically by contacting a dispersion of one or more cationic amphiphiles with the therapeutic molecules. Therapeutic molecules that can be delivered into cells according to the practice of the invention include DNA, RNA, and polypeptides. Representative uses of the therapeutic compositions of the invention include providing gene therapy, and delivery of antisense polynucleotides or biologically active polypeptides to cells. With respect to therapeutic compositions for gene therapy, the DNA is provided typically in the form of a plasmid for complexing with the cationic amphiphile.

Novel and highly effective plasmid constructs are also disclosed, including those that are particularly effective at providing gene therapy for clinical conditions complicated by inflammation. Additionally, targeting of organs for gene therapy by intravenous administration of therapeutic compositions is described.
13 Claims, 26 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 23

5. Document ID: US 5942490 A
Entry 5 of 48
File: USPT
Aug 24, 1999

US-PAT-NO: 5942490
DOCUMENT-IDENTIFIER: US 5942490 A

TITLE: Cell death regulators

DATE-ISSUED: August 24, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Korsmeyer; Stanley J.	St. Louis	MO	N/A	N/A

US-CL-CURRENT: 514/12; 514/2, 530/300, 530/324, 530/325, 530/326, 530/327, 530/328, 530/329, 530/350

ABSTRACT:

A Bcl-2 associated protein (Bax) and uses thereof.
26 Claims, 42 Drawing figures
Exemplary Claim Number: 1

Number of Drawing Sheets: 25

6. Document ID: US 5928638 A
Entry 6 of 48
File: USPT
Jul 27, 1999

US-PAT-NO: 5928638
DOCUMENT-IDENTIFIER: US 5928638 A

TITLE: Methods for gene transfer

DATE-ISSUED: July 27, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Uchida; Nobuko	Palo Alto	CA	N/A	N/A
Tsukamoto; Ann	Portola Valley	CA	N/A	N/A
Weissman; Irving	Redwood City	CA	N/A	N/A

US-CL-CURRENT: 424/93.21; 424/529, 435/320.1, 435/325, 435/69.1, 514/44, 530/389.6

ABSTRACT:

The present invention provides a method for optimizing gene transfer into hematopoietic stem cells (HSCs) by contacting the cells with hydroxyurea prior to gene transfer to induce HSCs in G0 into active cell cycle. This method is useful for treating patients suffering from a disease that is suitably treated by gene therapy or involves hematopoietic cells. A method is also provided for enhancing the efficacy of bone marrow transplantation by administering hydroxyurea to increase HSC yields.
9 Claims, 7 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

7. Document ID: US 5912168 A
Entry 7 of 48
File: USPT
Jun 15, 1999

US-PAT-NO: 5912168
DOCUMENT-IDENTIFIER: US 5912168 A

TITLE: CD95 regulatory gene sequences

DATE-ISSUED: June 15, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Watson; James D.	Auckland	N/A	N/A	NZX
Rudert; Fritz	Auckland	N/A	N/A	NZX

US-CL-CURRENT: 435/320.1; 536/23.1, 536/23.5, 536/24.1

ABSTRACT:

Regulatory DNA sequences that silence and enhance transcription of coding portions of the CD95 gene, which is instrumental in apoptosis, are disclosed. Proteinaceous transcription factors that bind to the silencer and enhancer regulatory sequences are also disclosed and are useful for modulating the expression of CD95 or other proteins. Methods for regulating apoptosis have therapeutic and prophylactic applications for a variety of disorders, including cancer, viral and retroviral infections, neurodegenerative disorders, immune system dysfunction, and other disorders.
10 Claims, 12 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

8. Document ID: US 5877220 A
Entry 8 of 48
File: USPT
Mar 2, 1999

US-PAT-NO: 5877220
DOCUMENT-IDENTIFIER: US 5877220 A

TITLE: Amide-based oligomeric cationic lipids

DATE-ISSUED: March 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schwartz; David Aaron	Encinitas	CA	N/A	N/A
Dwyer; Brian Patrick	San Diego	CA	N/A	N/A
Daily; William J.	Atascadero	CA	N/A	N/A
Srinivasan; Kumar	San Diego	CA	N/A	N/A
Brown; Bob Dale				

Encinitas
CA
N/A
N/A

US-CL-CURRENT: 514/626; 514/479, 514/613, 564/193, 564/197

ABSTRACT:

The present invention provides amide-based oligomeric cationic lipids. The present invention
further provides compositions of these amide-based cationic lipids with anionic macromolecules,
methods for interfering with protein expression in a cell utilizing these compositions and a kit
for preparing the same.
37 Claims, 2 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 2

9. Document ID: US 5877396 A
Entry 9 of 48
File: USPT
Mar 2, 1999

US-PAT-NO: 5877396
DOCUMENT-IDENTIFIER: US 5877396 A

TITLE: Mice mutant for functional Fc receptors and method of treating autoimmune diseases

DATE-ISSUED: March 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ravetch; Jeffrey V.	New York	NY	N/A	N/A
Takai; Toshiyuki	Okayama	N/A	N/A	JPX
Sylvestre; Diana	New York	NY	N/A	N/A
Clynes; Raphael	New York	NY	N/A	N/A

US-CL-CURRENT: 800/3; 424/9.1, 424/9.2, 800/11, 800/18, 800/9

ABSTRACT:

Disclosed herein is a non-naturally occurring non-human vertebrate animal incapable of expressing
a functional Fc receptor which may optionally be capable of expressing a protein which comprises
a domain of a human Fc receptor, as well as DNA encoding such Fc receptor-based proteins. Also
disclosed are in vivo methods for identifying proinflammatory agents that depend on a functional
Fc receptor, in vivo methods for identifying proinflammatory agents that do not depend on a
functional Fc receptor, and both in vivo and in vitro methods of identifying anti-inflammatory
agents. Pharmaceutical compositions containing, and methods of treating inflammation with
anti-inflammatory agents are also described.
18 Claims, 112 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 48

10. Document ID: US 5864015 A
Entry 10 of 48
File: USPT
Jan 26, 1999

US-PAT-NO: 5864015
DOCUMENT-IDENTIFIER: US 5864015 A

TITLE: Hodgkin's disease associated molecules

DATE-ISSUED: January 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pfreundschuh; Michael	Homburg/Saar	N/A	N/A	DEX

US-CL-CURRENT: 530/350; 530/387.1, 530/388.1, 530/388.2, 530/388.8, 530/389.1, 530/389.7

ABSTRACT:

The invention describes identification and isolation of molecules associated specifically with
Hodgkin's Disease. Uses of the molecules are described as well.
3 Claims, 4 Drawing figures
Exemplary Claim Number: 1,2
Number of Drawing Sheets: 4

11. Document ID: US 5856171 A
Entry 11 of 48
File: USPT
Jan 5, 1999

US-PAT-NO: 5856171
DOCUMENT-IDENTIFIER: US 5856171 A

TITLE: Cell death regulators

DATE-ISSUED: January 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Korsmeyer; Stanley J.	Clayton	MO	N/A	N/A

US-CL-CURRENT: 435/254.2; 435/252.3, 435/6, 435/810, 530/324, 530/350, 530/388.1, 530/389.1, 530/827, 536/23.5

ABSTRACT:

The invention provides a bcl-2 related protein, bcl-2 muteins, two-hybrid systems comprising interacting bcl-2-related polypeptide sequences, and uses thereof.
12 Claims, 70 Drawing figures
Exemplary Claim Number: 10
Number of Drawing Sheets: 45

12. Document ID: US 5821103 A
Entry 12 of 48
File: USPT
Oct 13, 1998

US-PAT-NO: 5821103
DOCUMENT-IDENTIFIER: US 5821103 A

TITLE: Deoxyribonuclease

DATE-ISSUED: October 13, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tanuma; Sei-ichi	Tokyo	N/A	N/A	JPX

US-CL-CURRENT: 435/199; 435/252.3, 435/320.1, 435/325, 536/23.2

ABSTRACT:

The present invention relates to novel DNases .alpha., .beta. and .gamma. capable of selectively cleaving the linker sites of chromatin DNA. The present invention also relates to novel DNase .gamma. involved in fragmentation of chromatin DNA in apoptosis. The present invention further relates to amino acid sequence of DNase .gamma., DNA encoding said enzyme, nucleotide sequence of said DNA, recombinant vector containing said DNA, transformant containing said recombinant vector, production method of DNase .gamma. comprising culture of said transformant, and antibody having affinity for said DNase .gamma., precursor thereof and the amino acid sequence of fragments thereof. The DNase .gamma. of the present invention takes part in the control system of apoptosis, and effectively contributes to the development of medications for the prevention, treatment and diagnosis of apoptosis-inhibitory or promotive diseases such as cancer, autoimmune diseases and viral infections. In addition, the DNases .alpha. and .beta. of the present invention increase upon viral infection to cleave viral DNA, and are useful for the development of therapeutic agents for viral infections.
18 Claims, 21 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 11

13. Document ID: US 5817628 A
Entry 13 of 48
File: USPT
Oct 6, 1998

US-PAT-NO: 5817628
DOCUMENT-IDENTIFIER: US 5817628 A

TITLE: Dynorphin a suppression of natural killer cell activity

DATE-ISSUED: October 6, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kreek; Mary Jeanne	New York	NY	N/A	N/A

US-CL-CURRENT: 514/13; 514/15, 530/327, 530/328

ABSTRACT:

This invention provides a method of suppressing the cytotoxic activity of mammalian Natural Killer (NK) cells.

The method of this invention comprises administering to an individual in need of treatment a polypeptide comprising the amino acid sequence corresponding to dynorphin A or a dynorphin A analog, including amidated analogs, in an amount sufficient to suppress the cytotoxic activity of NK cells. This invention is particularly useful for those individuals undergoing gene therapy who are to be infected with a viral or viroid vector containing a therapeutic gene. This invention is also useful to aid recipients of transplanted tissue and for individuals suffering from autoimmune diseases.
18 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

14. Document ID: US 5840568 A
Entry 14 of 48
File: USPT
Nov 24, 1998

US-PAT-NO: 5840568
DOCUMENT-IDENTIFIER: US 5840568 A

TITLE: Hodgkin's disease associated molecules and uses thereof

DATE-ISSUED: November 24, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pfreundschuh; Michael	Homburg/Saar	N/A	N/A	DEX

US-CL-CURRENT: 435/252.3; 435/320.1, 436/94, 536/23.1, 536/23.5,

536/24.31

ABSTRACT:

The invention describes identification and isolation of molecules associated specifically with
Hodgkin's Disease. Uses of the molecules are described as well.
19 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

15. Document ID: US 5854019 A
Entry 15 of 48
File: USPT
Dec 29, 1998

US-PAT-NO: 5854019
DOCUMENT-IDENTIFIER: US 5854019 A

TITLE: Cell-specific gene therapy using as promoter novel promoters for tissue inhibitors of
metalloproteinase-3

DATE-ISSUED: December 29, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sedlacek; Hans-Harald	Marburg	N/A	N/A	DEX
Wick; Marisa	Deutschland	N/A	N/A	DEX
Muller; Rolf	Marburg	N/A	N/A	DEX

US-CL-CURRENT: 435/69.1; 424/93.21, 435/320.1, 435/325, 435/455, 435/91.4, 536/23.1, 536/23.4

ABSTRACT:

The invention relates to promoter sequences for a gene comprising a tissue inhibitor of
metalloproteinase-3 (TIMP-3). This inhibitor is found in particular in macrophages, synovial
cells, and connective tissue cells. The invention also relates to cell-specific gene therapy of a
subject, wherein expression of a gene in a tissue is regulated by the aforementioned promoter
sequence operationally coupled to said gene. The promoter may also be used in diagnostic methods.

16 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

16. Document ID: US 5798264 A
Entry 16 of 48
File: USPT
Aug 25, 1998

US-PAT-NO: 5798264
DOCUMENT-IDENTIFIER: US 5798264 A

TITLE: Isolated nucleic acid molecules which encode renal cancer specific antigens, and uses
thereof

DATE-ISSUED: August 25, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pfreundschuh; Michael	Homburg/Saar	N/A	N/A	DEX

US-CL-CURRENT: 435/326; 435/320.1, 435/325, 536/23.5

ABSTRACT:

The invention involves isolated nucleic acid molecules which encode antigens which have been
associated with renal carcinoma. The molecule having the sequence of SEQ ID NO: 1 is exemplary.
Cell lines and expression vectors using these nucleic acid molecules are also a feature of the
invention.
8 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

17. Document ID: US 5777153 A
Entry 17 of 48
File: USPT
Jul 7, 1998

US-PAT-NO: 5777153
DOCUMENT-IDENTIFIER: US 5777153 A

TITLE: Cationic lipids

DATE-ISSUED: July 7, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lin; Kuei-Ying	Fremont	CA	N/A	N/A
Lewis; Jason G.	San Francisco	CA	N/A	N/A
Matteucci; Mark D.	Burlingame	CA	N/A	N/A
Wagner; Richard W.	Burlingame	CA	N/A	N/A

US-CL-CURRENT: 560/158; 536/22.1, 560/159, 564/157, 564/159

ABSTRACT:

The present invention is directed to new cationic lipids and intermediates in their synthesis
that are useful for transfecting nucleic acids or peptides into prokaryotic or eukaryotic cells.
The lipids comprise one or two arginine, lysine or ornithine residues linked to a lipophilic
moiety. The lipids form a composition when mixed with polyanions such as nucleic acids. The
compositions permit efficient transfer of polyanions into cells without significant toxicity to
the cells.
20 Claims, 0 Drawing figures
Exemplary Claim Number: 1

18. Document ID: US 5766585 A
Entry 18 of 48
File: USPT
Jun 16, 1998

US-PAT-NO: 5766585
DOCUMENT-IDENTIFIER: US 5766585 A

TITLE: Systemic gene treatment of connective tissue diseases with IRAP-1

DATE-ISSUED: June 16, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Evans; Christopher H.	Pittsburgh	PA	N/A	N/A
Robbins; Paul D.	Pittsburgh	PA	N/A	N/A

US-CL-CURRENT: 424/93.21; 424/529, 424/534, 424/93.1, 424/93.2, 435/320.1, 514/44

ABSTRACT:

The present invention relates to methods of therapeutic or prophylactic treatment of connective
tissue diseases by systemic or local delivery of a nucleic acid sequence to a mammalian host.
Expression of the nucleic acid sequence results in the systemic delivery of a biologically active
protein or peptide which acts to antagonize inflammatory, hypertrophic and erosive phenomenon
associated with connective tissue disease. Systemic delivery of such gene products results in
sustained treatment of connective tissue diseases such as rheumatoid arthritis and systemic lupus
erythematosus.
3 Claims, 2 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 2

19. Document ID: US 5700638 A
Entry 19 of 48
File: USPT
Dec 23, 1997

US-PAT-NO: 5700638
DOCUMENT-IDENTIFIER: US 5700638 A

TITLE: Cell death regulator

DATE-ISSUED: December 23, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Korsmeyer; Stanley J.	Clayton	MO	N/A	N/A

US-CL-CURRENT: 435/6; 435/477, 435/69.1, 435/7.1, 435/7.2, 435/7.21, 435/7.31, 435/7.8, 436/501,
530/350

ABSTRACT:

The invention provides a bcl-2 related protein, bcl-2 muteins, and uses thereof.
21 Claims, 59 Drawing figures
Exemplary Claim Number: 21
Number of Drawing Sheets: 35

20. Document ID: US 5698396 A
Entry 20 of 48
File: USPT
Dec 16, 1997

US-PAT-NO: 5698396
DOCUMENT-IDENTIFIER: US 5698396 A

TITLE: Method for identifying auto-immunoreactive substances from a subject

DATE-ISSUED: December 16, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pfreundschuh; Michael	Homburg/Saar	N/A	N/A	DEX

US-CL-CURRENT: 435/6; 435/5, 435/7.1, 435/7.23

ABSTRACT:

The invention describes methods for identifying a molecule of interest, as well as nucleic acid
molecules which encode it, and binding partners for it. A cDNA library from a cell expressing the
target is prepared, and expressed in host cells. Lysates of the host cells are screened with a
sample, treated to remove interfering binding partners. The treatment involves contact of the
sample to lysates of untransfected host cells, and host cells transfected or

transformed with the
same vector used to make the cDNA library. Also a part of the invention are antigens and cDNA
identified using the methodology.
16 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

21. Document ID: US 5691179 A
Entry 21 of 48
File: USPT
Nov 25, 1997

US-PAT-NO: 5691179
DOCUMENT-IDENTIFIER: US 5691179 A

TITLE: Cell death regulators

DATE-ISSUED: November 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Korsmeyer; Stanley J.	St. Louis	MO	N/A	N/A

US-CL-CURRENT: 435/355; 435/252.3, 435/254.11, 435/320.1, 435/325, 435/372, 435/372.2 , 536/23.5,
536/24.31

ABSTRACT:

A Bcl-2 associated protein (Bax) and uses thereof.
20 Claims, 42 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 25

22. Document ID: US 5405941 A
Entry 22 of 48
File: USPT
Apr 11, 1995

US-PAT-NO: 5405941
DOCUMENT-IDENTIFIER: US 5405941 A

TITLE: MEKK protein, capable of phosphorylating MEK

DATE-ISSUED: April 11, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johnson; Gary L.	Boulder	CO	N/A	N/A

US-CL-CURRENT: 530/350; 435/69.1, 536/23.1

ABSTRACT:

The isolated nucleic acid sequence for MEKK, the MEKK amino acid sequence and protein, antibodies
to MEKK, and methods for using such sequences, proteins and antibodies are described. The amino
acid sequence of MEKK (MEK kinase), was elucidated from a cDNA sequence encoding a protein of 672
amino acid residues (73 kilodaltons). When MEKK is expressed, it phosphorylates and activates
MEK. Phosphorylation and activation of MEK by MEKK is independent of Raf, a growth factor
regulated protein kinase that also phosphorylates MEK. Thus, MEKK and Raf converge at MEK in the
protein kinase network mediating the activation of MAPKs by hormones, growth factors, and
neurotransmitters.
19 Claims, 18 Drawing figures
Exemplary Claim Number: 10
Number of Drawing Sheets: 14

23. Document ID: JP 11000181 A
Entry 23 of 48
File: JPAB
Jan 6, 1999

PUB-NO: JP411000181A
DOCUMENT-IDENTIFIER: JP 11000181 A
TITLE: CDC25B GENE PROMOTOR, AND PREPARATION AND USE THEREOF

PUBN-DATE: January 6, 1999

INVENTOR-INFORMATION:
NAME
KOERNER, KATHRIN
MUELLER, ROLF PROF DR
SEDLACEK, HANS-HARALD

INT-CL (IPC): C12 N 15/09; A61 K 48/00; C12 N 5/10; C12 N 9/12; C12 P 21/02

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a new cdc25B gene promotor comprising a sequence capable of
hybridizing with a specific base sequence or a functional part thereof under a stringent
condition and useful for producing a nucleic acid-constructing substance for a gene therapy, etc.

SOLUTION: This new cdc25B gene promotor comprises a sequence capable of hybridizing with a
sequence expressed by the formula or a functional part thereof under a stringent condition, and
is capable of binding with a structural gene of an enzyme, a fused protein, a cytokine, a
chemokine, a growth factor, a receptor, an antibody, a vascular formation inhibitor, a peptide, a
hormone, a coagulant, a fibrinolytic protein, etc., and useful for the production of a nucleic
acid-structured substance for the gene for the gene therapy of a tumoral disease, leukemia, an
autoimmune disease, an allergy, an arthritis, an organ transplant rejection, a blood coagulative
disease, an infection, a hormonal disease, etc. The promotor is obtained by screening a mouse
genome phage library obtained from a mouse family 129FVJ.

24. Document ID: JP 10004980 A

Entry 24 of 48

File: JPAB

Jan 13, 1998

PUB-NO: JP410004980A
DOCUMENT-IDENTIFIER: JP 10004980 A
TITLE: NUCLEIC ACID STRUCTURE FOR CELL CYCLE-DEPENDING EXPRESSION OF GENE, CELL CONTAINING THE
STRUCTURE AND USE OF THE STRUCTURE FOR PRODUCING MEDICINE

PUBN-DATE: January 13, 1998

INVENTOR-INFORMATION:
NAME
MUELLER, ROLF
ZWICKER, JOERK
SEDLACEK, HANS-HARALD

INT-CL (IPC): C12 N 15/09; C12 N 5/10

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain the subject new structure useful for gene therapy, etc.,
containing an activator sequence, a promotor module of a specific base sequence and a gene coding
for an active substance to be expressed depending on cell cycle and capable of controlling a cell
cycle-depending expression.

SOLUTION: This new nucleic acid structure is effective on cell cycledepending expression of at
least one kind of gene including the following components: (A) an activator sequence, (B) a
promotor module having a nucleotide sequence to be linked with at least one kind of protein of
the E2F family and another nucleotide sequence to be linked with at least one kind of protein of
the CHF family and (C) a gene coding for an active substance expressed depending on cell cycle.
The structure is useful for gene therapy, etc., for an autoimmune disease, an infectious disease,
an allergy, an inflammatory disease, etc. The structure is obtained by combining a promotor
module and a gene coding for an active substance expressed depending on a cell cycle with a cell-
specific activator sequence.

25. Document ID: WO 9814569 A1
Entry 25 of 48

File: EPAB

Apr 9, 1998

PUB-NO: WO009814569A1
DOCUMENT-IDENTIFIER: WO 9814569 A1
TITLE: LEUKOCYTE-SPECIFIC PROTEIN AND GENE, AND METHODS OF USE THEREOF
PUBN-DATE: April 9, 1998

INVENTOR-INFORMATION:
NAME
COUNTRY
BLOCH, DONALD B
US
BLOCH, KENNETH D
US

INT-CL (IPC): C12 N 15/12; C07 K 14/47; C12 N 1/21; C12 N 5/08; G01 N 33/53; C12 N 15/67; C07 K
19/00; C07 K 16/18; C12 Q 1/68; A61 K 48/00

EUR-CL (EPC): C07K014/47

ABSTRACT:

The present invention is directed to a leukocyte specific gene Sp140 and its associated protein.
Since it has structural analogies to other regulatory proteins and is localized in the nuclear
body of certain cell types, Sp140 may be a transcription regulator involved in the body's
interaction with viruses and in promyelocytic leukemia. The Sp140 gene can be used in gene
therapy for treating certain viral diseases, autoimmune disorders and cancers, while the Sp140
protein may be useful as a diagnostic and prognostic marker in the analysis of certain autoimmune
disorders.

26. Document ID: US 5959074 A
Entry 26 of 48

File: DWPI

Sep 28, 1999

DERWENT-ACC-NO: 1999-561074
DERWENT-WEEK: 199947

TITLE: Peptides derived from a Herpes virus recombogenic motif useful for the production of
vaccines and in gene therapy
INVENTOR: DREYFUS, D H; GELFAND, E W

PRIORITY-DATA:
1997US-0807332
February 28, 1997
1996US-0012616
March 1, 1996
1996US-0023064
August 2, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5959074 A	September 28, 1999	N/A	029	C07K014/00

INT-CL (IPC): C07 K 14/00

ABSTRACTED-PUB-NO: US 5959074A
BASIC-ABSTRACT:

NOVELTY - Peptides derived from a Herpes virus recombogenic motif comprising a sequence of 34-40
amino acids, or their homologues, are new.

DETAILED DESCRIPTION - The peptide is selected from 10 sequences ((I)-(X)), given in the
specification. Homologue sequences have the following identifying characteristics:

(a) an initial and terminal amino acid comprising aspartate or glutamate, separated by 34-39
amino acids;

(b) a high probability (p less than 0.05) of alignment with a consensus sequence of 37 residues
(given in the specification) of formula (XI), as determined by:

(1) aligning the initial and terminal residues of the homologue sequence with those of (XI);

(2) aligning the intervening residues of the homologue with those of (XI) by maintaining the
spacing of (XI) while, if necessary, altering (by the insertion of spaces or the deletion of
residues) the spacing of the homologue so that non-conserved residues in (XI) are included as
non-matching characters, and conserved residues in (XI) (or a similar amino acid) are also found
in approximately the same positions in the homologue, where similar amino acids are defined as:

(i) neutral/weakly hydrophobic: P, A, G, S and T;

(ii) acidic/hydrophilic: Q, N, E, B, D and Z;

(iii) basic/hydrophilic: H, K and R;

(iv) hydrophobic/aliphatic: L, I, V and M;

(v) hydrophobic/aromatic: F, Y and W; and

(vi) C; and

(3) generating a distribution of 1500 random sequences of amino acids between the initial and
terminal residues and identifying the percentage of aligned residues.

asterisk NXXXXXSXXXWLKXXXXXXXXXXXXXXAXXGXLXAX asterisk (XI)

asterisk = D or E

X = a non-conserved amino acid

ACTIVITY - Antiallergic; Immunosuppressive; Cytostatic; Cardiant; Analgesic; Immunostimulant.

MECHANISM OF ACTION - Vaccine; Gene Therapy.

USE - The recombogenic motifs may be useful in the production of vaccines and in gene therapy to
treat allergies, autoimmune diseases, cancers, cardiovascular diseases, graft rejection,
hematopoietic disorders, immunosuppressive disorders, immunoproliferative diseases,
immunodeficiency diseases, infectious diseases, inflammatory diseases, jaundice, septic shock and
other immunological, genetic or metabolic defects.

DESCRIPTION OF DRAWING(S) - The diagram shows a schematic drawing of regions of the Herpes virus
DNA binding protein, BALF2, and the recombinase activating gene (RAG) proteins aligned with the
site-specific binding region of the Tcl transposase.

27. Document ID: WO 9943346 A1
Entry 27 of 48
File: DWPI
Sep 2, 1999

DERWENT-ACC-NO: 1999-540502
DERWENT-WEEK: 199945

TITLE: Detection and treatment of autoimmune disease, especially diabetes, rheumatoid arthritis,
multiple sclerosis and lupus erythematosis
INVENTOR: FAUSTMAN, D L; HAYASHI, T

PRIORITY-DATA:
1998US-0031629
February 27, 1998

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9943346 A1	September 2, 1999	E	148	A61K038/51

INT-CL (IPC): A61 K 31/70; A61 K 38/51; C12 N 9/12; G01 N 33/564; G01 N 33/573

ABSTRACTED-PUB-NO: WO 9943346A
BASIC-ABSTRACT:

NOVELTY - A method (I) for detecting autoimmune disease in a mammal, comprising detecting
proteosome activity in a biological sample, where a reduction in activity from a basal state
indicates disease, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method (II) for treating an autoimmune disease in a mammal, using an agent which:

(i) restores protein ubiquitinating enzyme function;

(ii) restores NFkappaB (a transcription factor) activity;

(iii) restores lymphocyte maturation; or

(iv) restores the cell cycle; and

(2) a method for screening for a modulator of LMP2 function, comprising contacting an assay
system (which has proteosome-mediated cleavage of a ubiquinated protein) with a candidate, and
monitoring cleavage.

ACTIVITY - Immunosupressive.

MECHANISM OF ACTION - Inhibitor.

USE - The new methods are useful for detecting and treating (via gene therapy) autoimmune disease
in a mammal, preferably a human, especially for detecting diabetes, rheumatoid arthritis,
multiple sclerosis, lupus erythematosis, myasthenia gravis, scleroderma, Crohn's disease,
ulcerative colitis, Hashimoto's disease, Grave's disease, Sjogren's syndrome, polyendocrine
failure, vitiligo, peripheral neuropathy, graft-versus-host disease, autoimmune polyglandular
syndrome type I, acute glomerulonephritis, Addison's disease, adult-onset idiopathic
hypoparathyroidism (AOIH), alopecia totalis, amyotrophic lateral sclerosis, ankylosing
spondylitis, autoimmune aplastic anemia, autoimmune hemolytic anemia, Behcet's disease, Celiac
disease, chronic active hepatitis, CREST syndrome, dermatomyositis, dilated cardiomyopathy,
eosinophilia-myalgia syndrome, epidermolisis bullosa acquisita (EBA), giant cell arteritis,
Goodpasture's syndrome, Guillain'Barre syndrome, hemochromatosis, Henoch-Scho nlein purpura,
idiopathic IgA nephropathy, insulin-dependent diabetes mellius (IDDM), juvenile rheumatoid

arthritis, Lambert-Eaton syndrome, linear IgA dermatosis, myocarditis, narcolepsy, necrotizing
vasculitis, neonatal lupus syndrome (NLE), nephrotic syndrome, pemphigoid, pemphigus,
polymyositis, primary sclerosing cholangitis, psoriasis, rapidly-progressive glomerulone phritis
(RPGN), Reiter's syndrome, stiff-man syndrome and thyroiditis (claimed).

28. Document ID: WO 9936562 A1
Entry 28 of 48
File: DWPI
Jul 22, 1999

DERWENT-ACC-NO: 1999-468988
DERWENT-WEEK: 199939

TITLE: Expression system containing therapeutic gene and an immunosuppressor gene useful for
treating an MHC-I autoimmune disease or killing tumor cells
INVENTOR: LINK, C J; RADOSEVICH, T J

PRIORITY-DATA:
1998US-0071409
January 14, 1998

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9936562 A1	July 22, 1999	E	154	C12N015/86

INT-CL (IPC): A61 K 48/00; C12 N 5/10; C12 N 15/34; C12 N 15/38; C12 N 15/86

ABSTRACTED-PUB-NO: WO 9936562A
BASIC-ABSTRACT:

NOVELTY - A nucleotide expression system for introduction of a therapeutic gene comprises:

(i) a nucleotide sequence encoding an immune suppression gene;

(ii) a promoter; and

(iii) a transcription termination signal, where the system is able to inhibit, evade or eliminate
a recipient cell immune response to the therapeutic gene when the gene is transformed into a
recipient cell.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a recombinant viral vector for permanent introduction of a therapeutic gene in a recipient
cell comprising the nucleotide expression system as defined above where the immune suppression
gene is a recombinant nonnative immune suppression gene;

(2) a recipient cell transformed with the vector of (1);

(3) a plasmid retroviral vector comprising an expression system comprising an immune suppression
gene selected from US11 or ICP47 or an antibiotic resistance gene; and

(4) a plasmid retroviral vector comprising a nucleotide sequence selected from the 6141, 6522,
7165 or 5874 bp sequences given in the specification.

ACTIVITY - Immunosuppressive; cytostatic.

MECHANISM OF ACTION - Suppresses immune response.

USE - The expression system and vectors containing it can be used for gene therapy, for treating
an MHC-I autoimmune disease or for killing tumor cells.

ADVANTAGE - The expression system contains an immunosuppressive gene which prevent host rejection
of the vector.

29. Document ID: WO 9934804 A1
Entry 29 of 48
File: DWPI
Jul 15, 1999

DERWENT-ACC-NO: 1999-430325
DERWENT-WEEK: 199936

TITLE: Use of adenosine A2A receptor and phosphodiesterase inhibitor to treat inflammatory
disease
INVENTOR: LINDEN, J M; SAREMBOCK, I ; SHELD, W M ; SULLIVAN, G W

PRIORITY-DATA:
1998US-0003930
January 8, 1998

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9934804 A1	July 15, 1999	E	043	A61K031/52

INT-CL (IPC): A61 K 31/52; A61 K 31/52; A61 K 31/40

ABSTRACTED-PUB-NO: WO 9934804A
BASIC-ABSTRACT:

NOVELTY - Adenosine A2A receptor agonist is used in combination with a Type IV phosphodiesterase
(PDE) inhibitor to treat inflammatory disease.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a composition comprising an
adenosine A2A receptor agonist and a Type IV PDE inhibitor, preferably rolipram
(4-(4-methoxy-3-cyclopentyloxyp henyl)-2-pyrrolidone), or a rolipram derivative or analog.

ACTIVITY - Antiinflammatory.

MECHANISM OF ACTION - Adenosine A2A receptor agonist; Type IV phosphodiest erase inhibitor.

USE - Used for inhibiting restenosis after balloon angioplasty (claimed), inhibiting inflammatory
response to a gene therapy vector, especially a viral or liposome vector, to improve efficiency
and stability of gene therapy (claimed), for treating autoimmune diseases such as lupus

erythematosus, multiple sclerosis, type I diabetes mellitus, Crohn's disease, ulcerative colitis,
inflammatory bowel disease, osteoporosis, arthritis, allergic diseases such as asthma, infectious
diseases such as sepsis, septic shock, infectious arthritis, endotoxic shock, gram negative
shock, toxic shock, cerebral malaria, bacterial meningitis, adult respiratory distress syndrome
(ARDS), TNF alpha -enhanced HIV replication and TNF alpha inhibition of reverse transcriptas e
inhibitor activity, wasting diseases (cachexia secondary to cancer and HIV), skin diseases such
as psoriasis, contact dermatitis, eczema, infectious skin ulcers, cellulitis, organ transplant
rejection (including bone marrow, kidney, liver, lung, heart and skin rejection), graft versus
host disease, adverse effects from amphotericin B treatment, adverse effects from interleukin-2,
OKT3, GM-CSF, cyclosporine or aminoglycoside treatment, ischemia, mucositis, infertility from
endometriosis, circulatory diseases induced or exacerbated by an inflammatory response such as
atherosclerosis, peripheral vascular disease, inflammatory aortic aneurysm, ischemia/reperfusion
damage, vasculitis, stroke, congestive heart failure, hemorrhagic shock, vasospasm following
subarachnoid hemorrhage, vasospasm following cerebrovascular accident, pleuritis, pericarditis
and encephalitis.

ADVANTAGE - Combinations of selective adenosine A2A receptor agonists and rolipram give
synergistically enhanced antiinflammatory effects, so that the dosage of adenosine A2A receptor
agonists may be reduced.

DESCRIPTION OF DRAWING(S) - The figure illustrates the synergistic effect of the adenosine A2A
receptor agonist WRC-0474 and rolipram in inhibiting TNF alpha -primed (10 U/ml), f-met-leu-phe
stimulated (100 nM) PMN superoxide production.

30. Document ID: WO 9933971 A1
Entry 30 of 48
File: DWPI
Jul 8, 1999

DERWENT-ACC-NO: 1999-419105
DERWENT-WEEK: 199935

TITLE: New oligomers that bind Ku protein
INVENTOR: DYNAN, W S; YOO, S

PRIORITY-DATA:
1997US-0070278
December 31, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9933971 A1	July 8, 1999	E	064	C12N015/11

INT-CL (IPC): C07 H 21/02; C12 N 15/11; C12 Q 1/68

ABSTRACTED-PUB-NO: WO 9933971A

BASIC-ABSTRACT:

NOVELTY - Novel oligomers that bind Ku protein are disclosed.

DETAILED DESCRIPTION - An oligomer (I), preferably made of RNA nucleotides , comprising a
sequence that specifically binds to Ku protein with and equilibrium dissociation constant less
than 10 nM, is new. The oligomer especially comprises the components A, A', B, C, C', D and E,
arranged 5'-A-B-C-D-C'-E-A'-3', wherein A hybridises to A', C hybridizes to C', B and E form
bulges, and D forms a structure which is either a bulge or a loop (the secondary structure formed
is represented as a figure in the specification).

INDEPENDENT CLAIMS are also included for:

(1) a method (A) of altering an activity of Ku protein, comprising bringing into contact (I) and
Ku protein;

(2) a method (B) of identifying physiological effects of Ku protein, comprising exposing a cell
to (I), and identifying a physiological difference between a cell exposed to (I) and a cell not
exposed to (I);

(3) a method (C) of isolating proteins that interact with Ku protein, comprising incubating (I)
with a sample containing Ku protein, such that oligomer-Ku complexes form, recovering these
complexes, and recovering any protein associated with the complexes.

ACTIVITY - Inhibition of DNA-dependent protein kinase (DNA-PK). Binding of RNA and DNA to Ku
protein was measured using EMSA (see Figure). Ku protein bound to nonselected RNA with an
apparent average Kd of 24 nM. Pooled RNA tested after the fourth and sixth round of SELEX had an
increased ability to bind Ku protein.

MECHANISM OF ACTION - The oligomers bind to the Ku protein, and prevent its interaction with
DNA-PK.

USE - The oligomers (I) can be used for the production of an agent that specifically inhibits Ku
DNA binding activity in plant or animal cells or inhibits DNA-dependent protein kinase (DNA-PK).
(I) are therefor expected to be useful as drugs for humans and animals as well as pesticides for
plants. (I) are also useful for treating certain forms of autoimmune disease, e.g. systemic lupus
erythematosus and scleroderma, detection and purification of Ku protein, and identificat ion of
proteins that interact with Ku protein (all claimed). They can also be used to inhibit DNA
repair, to sensitize cells and tissues (e.g. tumours) to therapeutic radiation.

ADVANTAGE - The Ku protein is involved in many nuclear processes, including transcription,
replication, and growth control as well as DNA repairor example, Ku protein is believed to be
involved in radiation resistance of certain tumours, for loss of foreign DNA from illegitimate
recombination in gene therapy, as well as being a target for autoantibodies in some patients with
autoimmune diseases. The oligomers of the invention bind to Ku, and should be useful for
preventing and treating any of these undesirable effects.

DESCRIPTION OF DRAWING(S) - The figure is a graph of percent RNA or DNA bound versus
concentration of Ku (nM) of five representative Ku protein-RNA and DNA binding curves obtained
with an electrophoretic mobility assay. T Radiolabelled nucleic acid probes were as follows:

nonselected RNA (squares), RNA after 4 rounds of selection (upside down triangles), RNA after 6
rounds of selection (filled triangles), HIV-TAR RNA (included for comparison, circles), 21 base
pair double stranded DNA (filled diamonds).

31. Document ID: HU 9801634 A2, EP 893493 A2, DE 19731154 A1, CZ 9802271 A3, AU 9877466 A, CN 1206044 A, JP 11089587 A, CA 2237698 A
Entry 31 of 48
File: DWPI
Jun 28, 1999

DERWENT-ACC-NO: 1999-097778
DERWENT-WEEK: 199931
COPYRIGHT 1999 DERWENT INFORMATION LTD
TITLE: New endothelial cells prepared from non-adherent mononuclear cells - useful in gene
therapy for treatment of cancer, autoimmune diseases and arthritis
INVENTOR: HAVEMANN, K; MULLER, R ; SEDLACEK, H ; MUELLER, R

PRIORITY-DATA:
1997DE-1052299
November 26, 1997
1997DE-1031154
July 21, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
HU 9801634 A2	June 28, 1999	N/A	000	A61K048/00
EP 893493 A2	January 27, 1999	G	034	C12N005/10
DE 19731154 A1	January 28, 1999	N/A	000	C12N015/79
CZ 9802271 A3	February 17, 1999	N/A	000	C12N005/02
AU 9877466 A	February 4, 1999	N/A	000	C12N005/08
CN 1206044 A	January 27, 1999	N/A	000	C12N005/10
JP 11089587 A	April 6, 1999	N/A	023	C12N015/09
CA 2237698 A	January 21, 1999	N/A	000	C12N005/10

INT-CL (IPC): A61 K 31/70; A61 K 35/14; A61 K 35/26; A61 K 35/28; A61 K 38/00; A61 K 38/22; A61 K
39/00; A61 K 39/395; A61 K 45/06; A61 K 47/00; A61 K 48/00; C12 N 5/02; C12 N 5/06; C12 N 5/08;
C12 N 5/10; C12 N 15/ 06; C12 N 15/07; C12 N 15/09; C12 N 15/63; C12 N 15/79; C12 N 15/85; C12 N
15/86

ABSTRACTED-PUB-NO: EP 893493A
BASIC-ABSTRACT:

Cells (A) for use in gene therapy are produced by: (a) isolating mononuclear, non-adherent cells
(B) from blood or cell-containing body fluids; (b) culturing (B) in a medium containing
gangliosides, phospholipids, glycolipids and/ or growth factors for endothelial cells (EC),
including those factors that regulate differentiation, survival, migration and/or
vascularisation; (c) optionally immortalising the cells of (a) or (b) by: (i) transformation
with, or activation of, an oncogene; or (ii) inactivation of a suppressor gene; and (d)
optionally treating cells of (a)-(c) with a nucleic acid construct (C) for gene therapy that
includes an effector gene which, by choice of suitable promoter systems, can be activated in a
cell-, cell cycle- or virus-specific manner and/or by hypoxia.

USE - (A) are used to treat tumours, leukaemias, autoimmune diseases, allergy, arthritic
conditions, inflammation, organ rejection, guest vs. host disease, blood coagulation or
circulatory diseases, anaemia, infections, hormonal disorders and central nervous system damage
(including prevention of infection or tumours by genetic immunisation). EC from step (b) can be
used directly for endothelisation of injured blood vessels or for stimulating angiogenesis.

ADVANTAGE - The specified culture medium of (a) provides a simple and safe method for isolation
and culture of mononuclear cells (specifical ly EC precursors) and their differentiation to EC.
Immortalisation allows a large number of transformed cells to be produced quickly from a small
initial quantity of EC or precursors.

32. Document ID: AU 9878113 A, WO 9855609 A1
Entry 32 of 48
File: DWPI
Dec 21, 1998

DERWENT-ACC-NO: 1999-080827
DERWENT-WEEK: 199919
COPYRIGHT 1999 DERWENT INFORMATION LTD
TITLE: New oligonucleotide that inhibits action of immunostimulatory sequence oligonucleotides -
particularly those present in gene therapy vectors or microbial pathogens, used to prolong gene
therapy expression and to treat e.g. infections or autoimmune disease
INVENTOR: RAY, E; ROMAN, M

PRIORITY-DATA:
1997US-0048793
June 6, 1997

PATENT-FAMILY:
PUB-NO
PUB-DATE

LANGUAGE PAGES MAIN-IPC

AU 9878113 A December 21, 1998 N/A 000 C12N015/00

WO 9855609 A1 December 10, 1998 E 049 C12N015/00

INT-CL (IPC): A61 K 48/00; C12 N 15/00; C12 N 15/09; C12 N 15/63; C12 N 15/79

ABSTRACTED-PUB-NO: WO 9855609A
BASIC-ABSTRACT:

Oligonucleotide (I) having a hexamer region of sequence 5'-Pu-Pu-Y-Z-Py-Py or 5'-Pu-Pu-Y-Z-Py-polyPy for inhibiting immunostimulation caused by immunostimulating-sequence oligonucleotides (II) that contain a hexamer region consisting of at least one CpG motif flanked by two 5'-Pu and two 3'-Py is new. Pu = purine; Py = pyrimidine; Y = any natural or synthetic nucleotide other than C; Z = any natural or synthetic nucleotide, but is Y is not Guanosine (G) or Inosine (I), then Z must be. Also new are methods for identifying (I) and for detecting (II) in a host cell.

USE - (I) are used to inhibit immunostimulatory activity of (II) when this is present in (i) a recombinant expression vector (being used for gene therapy or genetic immunisation) or (ii) a microbe (particularly one in a host and associated with an autoimmune disease). Particularly (I) prolong gene expression from the vector and reduce inflammation caused by microbial infection. They also modulate activity of (II), e.g. where these are used as adjuvants to boost an immune response, e.g. in immunotherapy, in contact with vertebrate lymphocytes or monocytes by reducing the Th1-type response and stimulating the Th2-type response to an antigen (including antigen-stimulated immunoglobul in (Ig) G1 production).

ADVANTAGE - Prolonged expression from the gene therapy vector avoids the need for repeated treatments and re-engineering of the vector to eliminate (II). (I) provide precise control over the effect of (II)-based adjuvants and can be used even where the existence, identity and location of (II) are unknown. (I) are effective at very low doses.

33. Document ID: AU 9877513 A, WO 9855597 A1
Entry 33 of 48
File: DWPI
Dec 21, 1998

DERWENT-ACC-NO: 1999-045786
DERWENT-WEEK: 199919

TITLE: Supporting viability, proliferation and differentiation of dendritic cells - comprises culturing mammalian haematopoietic cell population which forms a stromal cell layer
INVENTOR: NI, K; O'NEILL, H C

PRIORITY-DATA:
1997AU-0007230 June 6, 1997

PATENT-FAMILY:
PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC

AU 9877513 A December 21, 1998 N/A 000 C12N005/08

WO 9855597 A1 December 10, 1998 E 097 C12N005/08

INT-CL (IPC): A61 K 35/14; A61 K 35/28; C12 N 5/06; C12 N 5/08

ABSTRACTED-PUB-NO: WO 9855597A
BASIC-ABSTRACT:

A method (A) for supporting the viability, proliferation or differentiatio n of mammalian dendritic cells or stem cells, comprises culturing a mammalian haematopoietic cell population which forms a stromal cell layer which supports the dendritic cells or the stem cells. Also claimed are: (1) a method (B) for supporting the viability, proliferation or differentiation of mammalian dendritic or stem cells, comprising co-culturing a mammalian haematopoietic cell population with a mammalian stromal cell population, where the dendritic or stem cells develop from the haematopoietic cell population; (2) a method (C) for producing a haematopoietic cell/stromal cell co-culture comprising: (a) depleting the stromal cells of non-adherent cells; (b) irradiating the stromal cells; (c) overlaying onto the stromal cells a single cell suspension of haematopoietic cells, and (d) culturing the cells in the presence of serum proteins so that dendritic or stem cells can develop from the haematopoietic cells; (3) a cell culture supernatant composition comprising cell culture supernatant harvested from a stromal cell layer cultured in the method (C), which supports the viability, proliferation or differentiation of mammalian dendritic or stem cells, and (4) a cell culture molecule composition comprising molecules harvested from stromal cell layers cultured in (C) supporting the viability, proliferation and/or differentia tion of mammalian dendritic or stem cells.

USE - The methods are used to produce reliably stable and pure cultures of dendritic, especially dendritic precursor cells, and stem cells, useful in medical research, especially gene therapy or immunotherapy of cancer, infectious disease, autoimmunity and in tumour therapy.

ADVANTAGE - The methods are simple and fast and provide mammalian dendritic precursor cells and stem cells in high quantities and good purities which can not be provided in prior art methods.

34. Document ID: AU 9874789 A, WO 9851809 A1
Entry 34 of 48
File: DWPI
Dec 8, 1998

DERWENT-ACC-NO: 1999-034813
DERWENT-WEEK: 199916

TITLE: Production of viral vectors, particularly HSV vectors - using a source vector and a
mutating cassette containing a restriction site which is cleaved after homologous recombination
and then re-joined.
INVENTOR: GLORIOSO, J C; KRISKY, D

PRIORITY-DATA:
1997US-0854601
May 12, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 9874789 A	December 8, 1998	N/A	000	C12N015/86
WO 9851809 A1	November 19, 1998	E	060	C12N015/86

INT-CL (IPC): C12 N 15/86

ABSTRACTED-PUB-NO: WO 9851809A
BASIC-ABSTRACT:

A novel method for preparing a viral vector comprises: (a) co-transfecting a source vector and a
mutating cassette (I) together into a population of host cells; where the mutating cassette
comprises at least a 3' fragment and a 5' fragment, each of which are homologous to a region of
the source vector, and a restriction site not present in the sequence of the source vector; and
whereby homologous recombination occurs between the mutating cassette and the source vector such
that the mutating cassette replaces a genomic polynucleotide (PN) within the homologous region;
(b) plaquing the population of co-transfecte d host cells; (c) selecting plaques comprising cells
in which recombinatio n has occurred between the source vector and the mutating cassette; (d)
isolating the viral DNA from the plaques; (e) digesting the isolated viral DNA with a single
restriction endonuclease appropriate for cleaving the viral DNA only at the restriction site
within the mutating cassette, whereby two viral PNs are produced; (f) isolating and purifying the
two viral PNs; and (g) joining the two viral PNs to form a viral vector. Also claimed is a herpes
simplex virus (HSV) vector comprising 2 or more non-native independent expression cassettes.

USE - The method is used for the production of HSV vectors for gene therapy for diseases such as
neoplasms, autoimmune diseases, neurological diseases such as neurodegenerative disorders,
hormonal imbalances or for use as vaccines.

35. Document ID: WO 9826061 A2, AU 9857957 A, NO 9902756 A, EP 948614 A2
Entry 35 of 48

DERWENT-ACC-NO: 1998-348521
DERWENT-WEEK: 199948

TITLE: Vectors containing accessory molecule ligand genes - used for altering immunoreactivity of
cells, particularly for treatment of neoplasia or autoimmune disorders, e.g. rheumatoid arthritis
INVENTOR: CANTWELL, M; KIPPS, T J ; SHARMA, S

PRIORITY-DATA:
1997US-0982272
December 1, 1997
1996US-0032145
December 9, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9826061 A2	June 18, 1998	E	166	C12N015/00
AU 9857957 A	July 3, 1998	N/A	000	C12N015/00
NO 9902756 A	August 9, 1999	N/A	000	C12N000/00
EP 948614 A2	October 13, 1999	E	000	C12N015/00

INT-CL (IPC): A61 K 48/00; C12 N 0/00; C12 N 15/00

ABSTRACTED-PUB-NO: WO 9826061A
BASIC-ABSTRACT:

A method for altering the immunoreactivity of human cells, comprises introducing a gene encoding
an accessory molecule ligand (AML) into the cells so that the AML is expressed on the surface of
the cells.

Also claimed are: (1) a gene therapy vector (GTV) containing an AML gene; (2) a genetic construct
containing a promoter operatively linked to an AML gene which is also operatively linked to a
polyadenylation signal; (3) a genetic construct in which a promoter is operatively linked to a
chimeric AML gene and a polyadenylation signal; (4) a GTV containing a chimeric AML gene; (5) a
human, animal, insect or bacterial cell containing a GTV or construct as in (1)-(4); (6) a
chimeric AML gene comprising at least one domain or sub-domain gene from a first AML gene
operatively linked to a domain or sub-domain gene from a second AML gene; (7) a chimeric AML gene
comprising at least a portion of a gene encoding Domains I and II derived from an AML operatively
linked to at least a portion of a gene encoding a Domain of an AML which in turn is operatively
linked to at least a portion of a gene encoding Domain IV of an AML; (8) a

chimeric AML
comprising at least a portion of the fourth domain of human Fas-ligand; (9) a chimeric AML
derived from a Fas-ligand in which at least one matrix metalloproteinase cleavage site has been
removed; (10) a chimeric AML comprised of domain III of the murine Fas-ligand or the human CD70
gene, and domain IV of the human Fas-ligand; (11) a GTV containing a gene encoding chimeric AML
as in (8)-(10); and (12) a cell containing a GTV as in (11).

USE - Vectors containing the AML genes can be used in gene therapy for treating neoplasia or
autoimmune disorders such as rheumatoid arthritis. They can also be used for vaccination to
produce immunity against a virus cell, bacteria, protein, fungus or neoplasia.

36. Document ID: EP 941238 A2, WO 9821232 A2, AU 9852588 A
Entry 36 of 48
File: DWPI
Sep 15, 1999

DERWENT-ACC-NO: 1998-297861
DERWENT-WEEK: 199942

TITLE: New DNA encoding Fas ligand agonist including, e.g. deletion - useful for, e.g. treating
auto-immune diseases or transplant rejection
INVENTOR: CHU, K

PRIORITY-DATA:
1997US-0968686
November 12, 1997
1996US-0030871
November 13, 1996
1997US-0039972
February 10, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 941238 A2	September 15, 1999	E	000	C07K014/00
WO 9821232 A2	May 22, 1998	E	075	C07K014/00
AU 9852588 A	June 3, 1998	N/A	000	C07K014/00

INT-CL (IPC): C07 K 14/00

ABSTRACTED-PUB-NO: WO 9821232A
BASIC-ABSTRACT:

New DNA (I) encodes a Fas ligand (FL) agonist (II) that is: (a) a deletion mutant (IIa) of pro-FL
lacking a continuous segment of 10-17 aa starting at residue 130 of pro-FL having a 281 aa
sequence (given in the specification), or (b) chimaera (IIb) of the C-terminus of a non-cleavable
transmembrane domain of a cell-surface protein (III) fused to the N-terminal extracellular domain
of FL, lacking a continuous segment as defined above. Also new are: (1) vectors containing (I)
and promoter; (2) nucleic acid encoding a FL polypeptide that remains on a cell membrane longer
than native FL, and (3) (II).

USE - The vectors are used to produce (II) in transfected cells. These cells (expressing (II) in
non-cleavable form) are used in vitro to identify cells that express Fas and, in vivo or in
vitro, for reducing proliferation of Fas-expressing cells (specifically activated B or T cells).
(II), or (I) in gene therapy procedures, are used for treatment of autoimmune diseases, e.g.
multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, glomerulonephritis,
myasthenia gravis, cystic fibrosis, type I diabetes, and transplant rejection. (II) are
administered orally, parenterally or topically, at 5-250 mu g/kg. In gene therapy, the dose of
(I) is 100 ng to 200 mg (delivered directly or used to transfect cells ex vivo for subsequent
return to the patient).

ADVANTAGE - When expressed in host cells, (II) are surface bound in conventional type II
prohormone form, but are not cleaved so remain on the cell for longer.

37. Document ID: BR 9800563 A, DE 19704301 C1, EP 857781 A2, CZ 9800332 A3, AU 9852931 A, HU 9800247 A2, CA 2222981 A, JP 11000178 A
Entry 37 of 48
File: DWPI
Jun 29, 1999

DERWENT-ACC-NO: 1998-180486
DERWENT-WEEK: 199937

TITLE: Human endoglin gene promoter - and DNA constructs containing it, useful for gene therapy
INVENTOR: GRAULICH, W; MULLER, R ; NETTELBECK, D ; SEDLACEK, H ; MUELLER, R ; SEDLACEK, H H

PRIORITY-DATA:
1997DE-1004301
February 6, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
BR 9800563 A	June 29, 1999	N/A	000	C07K014/495
DE 19704301 C1	March 26, 1998	N/A	018	C12N015/11
EP 857781 A2	August 12, 1998	G	000	C12N015/11
CZ 9800332 A3	August 12, 1998	N/A		

		000	
			C12N015/85
AU 9852931 A			
	August 13, 1998		
		N/A	
		000	
			C12N015/85
HU 9800247 A2			
	October 28, 1998		
		N/A	
		000	
			C12N015/11
CA 2222981 A			
	August 6, 1998		
		N/A	
		000	
			C12N015/85
JP 11000178 A			
	January 6, 1999		
		N/A	
		015	
			C12N015/09

INT-CL (IPC): A61 K 31/70; A61 K 38/00; A61 K 38/17; A61 K 38/18; A61 K 38/19; A61 K 39/00; A61 K 39/395; A61 K 48/00; C07 H 21/04; C07 K 14/495; C07 K 14/52; C07 K 14/705; C12 N 5/10; C12 N 5/12; C12 N 15/09; C12 N 15/11; C12 N 15/12; C12 N 15/52; C12 N 15/79; C12 N 15/85; C12 N 15/86; C12 N 15/09; C12 R 1/91

ABSTRACTED-PUB-NO: DE19704301C
BASIC-ABSTRACT:

A human endoglin gene promoter comprises at least part of a defined sequence of 2415 bp given in the specification and activates transcription of an effector gene.

Also claimed is a nucleic acid construct containing a promoter sequence as above.

USE - Constructs comprising a gene under the control of the endoglin promoter, where the gene codes for a cytokine, a chemokine, a growth factor, a cytokine, chemokine or growth factor receptor, an antiproliferat ive, cytostatic or apoptotic protein, an antibody, an antibody fragment, an angiogenesis inhibitor, a clotting factor, a clotting inhibitor, a fibrinolytic protein, a circulatory active protein, an immunogen or an enzyme that converts a prodrug into a drug, can be inserted into vectors and used for gene therapy of tumours, leukaemia, autoimmune diseases, allergies, arthritis, inflammations, organ rejection, graft-versus-host disease, clotting disorders, circulatory disorders, anaemia, infections or CNS damage.

38. Document ID: US 5912168 A, WO 9808965 A2, AU 9740367 A
Entry 38 of 48
File: DWPI
Jun 15, 1999

DERWENT-ACC-NO: 1998-179445
DERWENT-WEEK: 199930

TITLE: New regulatory regions from the CD95 gene and transcription factors that interact with them - for control of apoptosis, e.g. in treatment of cancer, viral infection, neuro:degeneration and auto:immune disease
INVENTOR: RUDERT, F; WATSON, J D

PRIORITY-DATA:
1996US-0713557
August 30, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5912168 A	June 15, 1999	N/A	000	C12N015/63
WO 9808965 A2	March 5, 1998	E	060	C12N015/85
AU 9740367 A	March 19, 1998	N/A	000	C12N015/85

INT-CL (IPC): A61 K 31/70; A61 K 38/17; C07 K 14/705; C12 N 15/11; C12 N 15/12; C12 N 15/63; C12 N 15/85

ABSTRACTED-PUB-NO: US 5912168A
BASIC-ABSTRACT:

Eleven nucleic acid sequences (Ia)-(Ik) or sequences with at least 70% identity to them or at least 90% identity to any part of them containing 8 contiguous nucleotides, are new.

5'-AGTAATGATG TCATTATCCA AACATACCTT CTGTAAAATT CATG-3' (Ia)

5'-GTCTGGAACT GCATCCAAAT TCAGGTTC-3' (Ib)

5'-KMMTGAKGTM AKM-3' (Ic)

5'-AGTAATGAT TCATTATCCA AA-3' (Id)

5'-TAATGATGTC ATTA-3' (Ie)

5'-AGTAATGAT GTGTCATTAT CCAAA-3' (If)

5'-AGTAATGAT GTCATTATCC AAA-3' (Ig)

5'-GAATTTGGAT GCAG-3' (Ih)

5'-GAACCTGAAT TTGGATGCAG TTCCAGAC-3' (Ii)

5'-ATCCAAA-3' (Ij)

5'-AGTAATGATG TCATTA-3' (Ik)

Also new are:

(1) isolated polypeptide transcription factors (TF), that forms a DNA/polypeptide complex with (one of (Ia)-(Ik);

(2) any isolated nucleic acid (II) that forms, with a TF, a complex able to modulate transcription of a coding part of the CD95 gene;

(3) a TF that forms the complexes of (2);

(4) nucleic acids of 678, 434 and 384 bp, or sequences with at least 70% identity, sequences are given in the specification;

(5) polypeptides of 209, 91 and 101 amino acids (aa), sequences given in the specification (two
Pur alpha proteins and a Pur alpha -like protein, respectively); and

(6) a method for modulating apoptosis or CD95 expression by regulating binding of specific
polypeptides to at least one of (Ia)-(Ie).

USE - (Ia)-(Ik) are regulatory regions (silencers or enhancers) from the CD95 gene which is
involved in apoptosis, i.e. inhibition (stimulation) of CD95 expression will inhibit (stimulate)
apoptosis. Regulation of apoptosis is useful in treatment of cancer, (retro)viral infection,
neurodegeneration and autoimmune disease, e.g. by gene therapy for expressing TF or expression of
antisense sequences to inhibit TF production. The new nucleic acids and TF are also useful for
studying regulation of CD95 in vitro or in vivo; to screen for modulators and as probes to
isolate related genes.
ABSTRACTED-PUB-NO:

WO 9808965A EQUIVALENT-ABSTRACTS:

Eleven nucleic acid sequences (Ia)-(Ik) or sequences with at least 70% identity to them or at
least 90% identity to any part of them containing 8 contiguous nucleotides, are new.

5'-AGTAATGATG TCATTATCCA AACATACCTT CTGTAAAATT CATG-3' (Ia)

5'-GTCTGGAACT GCATCCAAAT TCAGGTTC-3' (Ib)

5'-KMMTGAKGTM AKM-3' (Ic)

5'-AGTAATGAT TCATTATCCA AA-3' (Id)

5'-TAATGATGTC ATTA-3' (Ie)

5'-AGTAATGAT GTGTCATTAT CCAAA-3' (If)

5'-AGTAATGAT GTCATTATCC AAA-3' (Ig)

5'-GAATTTGGAT GCAG-3' (Ih)

5'-GAACCTGAAT TTGGATGCAG TTCCAGAC-3' (Ii)

5'-ATCCAAA-3' (Ij)

5'-AGTAATGATG TCATTA-3' (Ik)

Also new are:

(1) isolated polypeptide transcription factors (TF), that forms a DNA/polypeptide complex with
(one of (Ia)-(Ik);

(2) any isolated nucleic acid (II) that forms, with a TF, a complex able to modulate
transcription of a coding part of the CD95 gene;

(3) a TF that forms the complexes of (2);

(4) nucleic acids of 678, 434 and 384 bp, or sequences with at least 70% identity, sequences are
given in the specification;

(5) polypeptides of 209, 91 and 101 amino acids (aa), sequences given in the specification (two
Pur alpha proteins and a Pur alpha -like protein, respectively); and

(6) a method for modulating apoptosis or CD95 expression by regulating binding of specific
polypeptides to at least one of (Ia)-(Ie).

USE - (Ia)-(Ik) are regulatory regions (silencers or enhancers) from the CD95 gene which is
involved in apoptosis, i.e. inhibition (stimulation) of CD95 expression will inhibit (stimulate)
apoptosis. Regulation of apoptosis is useful in treatment of cancer, (retro)viral infection,
neurodegeneration and autoimmune disease, e.g. by gene therapy for expressing TF or expression of
antisense sequences to inhibit TF production. The new nucleic acids and TF are also useful for
studying regulation of CD95 in vitro or in vivo; to screen for modulators and as probes to
isolate related genes.

39. Document ID: JP 10500413 X, WO 9746676 A1, AU 9730479 A, EP 911397 A1
Entry 39 of 48
File: DWPI
Aug 24, 1999

DERWENT-ACC-NO: 1998-042184
DERWENT-WEEK: 199944

TITLE: DNA encoding tumour antigen protein, fragments of which bind to MHC class I antigens -
useful in gene therapy and auto:immune diseases
INVENTOR: IMAI, Y; ITOH, K ; SHICHIJO, S

PRIORITY-DATA:
1996JP-0330424 November 25, 1996
1996JP-0168429 June 7, 1996
1996JP-0287572 October 8, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 10500413 X	August 24, 1999	N/A	000	C12N015/12
WO 9746676 A1	December 11, 1997	J	049	C12N015/12
AU 9730479 A	January 5, 1998	N/A	000	C12N015/12
EP 911397 A1	April 28, 1999	E	000	C12N015/12

INT-CL (IPC): A61 K 31/70; C07 K 14/82; C07 K 16/32; C12 N 5/10; C12 N 15/12

ABSTRACTED-PUB-NO: WO 9746676A
BASIC-ABSTRACT:

New DNA (I) encodes a tumour antigen protein (800 amino acids; sequence given in the
specification) or sequences derived from it by addition, substitution or deletion of one or more

amino acid residues. Also claimed are: (1) DNA hybridising to this DNA; (2) plasmid expression
vectors containing the DNA; (3) transformant hosts containing the vectors; (4) the tumour antigen
protein as prepared by culture of the transformants; (5) antibodies to the protein and its
fragments; (6) fragments of the tumour antigen protein (especially those consisting of residues
749-757, 736-744, 785-793 and 690-698 of the sequence); and (7) DNA (and its corresponding RNA)
consisting of at least eight consecutive bases of the full DNA sequence.

USE - The tumour antigen protein has the ability to form fragments by intracellular digestion
which bind to major histocompatibility complex (MHC) class I antigens to form a complex which is
recognised by T-cells. The DNA is useful for gene therapy of tumours and autoimmune diseases.

40. Document ID: EP 842287 A1, WO 9706272 A2, US 5622856 A
Entry 40 of 48
File: DWPI
May 20, 1998

DERWENT-ACC-NO: 1997-154276
DERWENT-WEEK: 199824

TITLE: Nucleic acid encoding molecule with AAV helper functions - has p5 promoter in non-native
position to provide high level prodn. of recombinant virion(s) for gene therapy
INVENTOR: NATSOULIS, G

PRIORITY-DATA:
1996US-0688648
July 29, 1996
1995US-0510790
August 3, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 842287 A1	May 20, 1998	E	000	C12N015/86
WO 9706272 A2	February 20, 1997	E	061	C12N015/86
US 5622856 A	April 22, 1997	N/A	018	C12N005/10

INT-CL (IPC): C07 K 14/015; C12 N 5/10; C12 N 7/04; C12 N 15/63; C12 N 15/86

ABSTRACTED-PUB-NO: US 5622856A
BASIC-ABSTRACT:

A novel nucleic acid (I) encodes a molecule with AAV (adeno-associated virus) helper functions,
comprises: (i) AAV rep and cap coding regions, linked to control sequences; and (ii) a sequence
(Ia) comprising the AAV p5 promoter region at other than its natural position relative to the rep
coding region in the wild-type (wt) AAV genome. Also new are: (1) a AAV helper construct (II)
contg. (I); (2) an AAV packaging cell prepd. by transfecting a host cell with (II); and (3) an
AAV producer cell able to produce recombinant AAV virions consisting of the packaging cell of (2)
transfected with an AAV vector.

USE - The producer cells are used to make recombinant AAV virions (claimed) which are useful as
delivery vectors for gene therapy e.g. for treating inflammatory diseases, autoimmune or
infectious diseases, including AIDS, cancer, cardiovascular disease, haemophilia, cystic fibrosis
and many others. The virions can also be used for the prodn. of transgenic animals, in vaccines,
in ribozyme/antisense therapy and to deliver genes to cells in vitro.

ADVANTAGE - (II) provide increased prodn. of recombinant virions, probably because of reduced
toxicity of Rep to the host cells. The structure of (I) can be adjusted so that prodn. of wt AAV
virions is minimised.
ABSTRACTED-PUB-NO:

WO 9706272A EQUIVALENT-ABSTRACTS:

A nucleic acid molecule encoding AAV helper functions, were the molecule comprises: an AAV rep
coding region; an AAV cap coding region; and a first nucleotide sequence comprising an AAV p5
promoter region, the first nucleotide sequence arranged in the molecule such that the p5 promoter
region is situated 3' relative to the rep coding region.

41. Document ID: WO 9505389 A1, AU 9475625 A
Entry 41 of 48
File: DWPI
Feb 23, 1995

DERWENT-ACC-NO: 1995-098716
DERWENT-WEEK: 199513

TITLE: Compsn. contg. sequence specific glyco-conjugate DNA ligand - for modulating gene
transcription, e.g. to induce immunosuppression, does not cause DNA cleavage, also new ligand
INVENTOR: CRABTREE, G R; DANISHEFSKY, S J ; HO, S N ; SCHREIBER, S L

PRIORITY-DATA:
1993US-0109271
August 18, 1993

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9505389 A1	February 23, 1995	E	085	C07H013/12
AU 9475625 A	March 14, 1995	N/A	000	C07H013/12

INT-CL (IPC): C07 H 13/12; C12 Q 1/68

ABSTRACTED-PUB-NO: WO 9505389A
BASIC-ABSTRACT:

Compsn. contains a glycoconjugate DNA ligand (L), without DNA-strand cleavage activity, of
formula (I), where R1 = H, OH, lower alkyl or alkoxy, aryloxy or hydroxyalkyl; R2 = H, lower
alkyl or alkoxy, iodo, Br, F or Cl. Also new are (1) (I) with R1 = OMe and R2 = iodo (Ia;
calicheamicin-MG, see fig.); (2) glycoconjugate-liganded NFAT (nuclear activator of T cells)
receptor site comprising (Ia) bound to sequence contg. the NFAT receptor site; and (3) methods
for identifying sequence-specific (I) and (I) that are differential transcription (ant)agonists.

USE - (I) are used to modulate (in cells or in vitro) transcriptional activity of genes (linked
to cis-acting sequences) to which (I) bind. Esp. they inhibit NFAT-DNA complex formation or
displace NFAT from preformed complexes. They can be used for prevention or treatment, esp. to
induce immune suppression (suppress T cell activation), e.g. to prevent graft rejection, but
other possible uses include reversal of neoplastic transformation, inhibition of metastases, gene
therapy of autoimmune and genetic diseases etc. (I) can also be used as research or diagnostic
reagents, e.g. to purify NFAT from, nuclear extracts, to titrate NFAT in DNA footprinting etc.

ADVANTAGE - (I) bind reversibly to DNA recognition sites in a sequence-spe cific manner and cause
no damage to, or cleavage of, DNA.

42. Document ID: JP 11504520 W, WO 9635719 A1, AU 9656989 A, EP 826006 A1
Entry 42 of 48
File: DWPI
Apr 27, 1999

DERWENT-ACC-NO: 1996-518619
DERWENT-WEEK: 199927

TITLE: Synthetic crosslinker protein for delivering cpds. across mucous membrane - comprises
binding sites for agent to be delivered and transcytosis receptor, partic. for gene therapy or
removal of autoantibodi es in autoimmune disease
INVENTOR: GILMOUR, J E M; UNSWORTH, D J

PRIORITY-DATA:
1995GB-0009620
May 12, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 11504520 W	April 27, 1999	N/A	030	C12N015/09
WO 9635719 A1	November 14, 1996	E	030	C07K016/18
AU 9656989 A	November 29, 1996	N/A	000	C07K016/18
EP 826006 A1	March 4, 1998	E	000	C07K016/18

INT-CL (IPC): A61 K 39/395; C07 K 16/18; C07 K 16/42; C12 N 15/09; C12 P 21/08

ABSTRACTED-PUB-NO: WO 9635719A
BASIC-ABSTRACT:

Synthetic crosslinker protein (SCP) able to bind a (macro)mol. to a transcytosis receptor (TR)
for transport of the mol. across a mucous membrane, comprises a 1st and 2nd binding region (BR1
and BR2), which selectively bind the mol. and a site on the TR, respectively.

USE - The SCP is used to transport a mol. across the epithelium, esp. to deliver donor IgG serum
to the internal organs of an immunodeficie nt patient, or to treat autoimmune disease (e.g.
systemic lupus erythematosus) by binding autoantibodies, although delivery of many other sorts of
drugs, e.g. nucleic acids, is also contemplated.

ADVANTAGE - The SCP allows delivery of agents that can not normally cross membranes and, in the
case of autoantibodies, allows specific removal by secretion across the epithelium via the bile
duct system.

43. Document ID: WO 9623889 A1, EP 804598 A1, DE 19503082 A1, AU 9652598 A
Entry 43 of 48
File: DWPI
Aug 8, 1996

DERWENT-ACC-NO: 1996-371437
DERWENT-WEEK: 199637

TITLE: Recombinant DNA virus vectors, esp. for gene therapy - with deleted replication-essential
sequence and inserted foreign sequence
INVENTOR: BERTLING, W; KALDEN, J ; KULMBERG, P ; LINDEMANN, A ; MERTELSMANN, R ; ROSENTHAL, F ; VEELKEN, H

PRIORITY-DATA:
1995DE-1003082
February 1, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9623889 A1	August 8, 1996	E	027	C12N015/63
EP 804598 A1	November 5, 1997	G		

000
C12N015/63
DE 19503082 A1
August 8, 1996
N/A
012
C12N015/79
AU 9652598 A
August 21, 1996
N/A
000
C12N015/63

INT-CL (IPC): A61 K 48/00; C07 K 2/00; C12 N 15/63; C12 N 15/79; C12 N 15/86; C12 Q 1/68

ABSTRACTED-PUB-NO: WO 9623889A
BASIC-ABSTRACT:

Recombinant RNA-virus vectors (VV) for cell modulation, esp. gene therapy, have a sequence that
has been altered by removing 1 replication- essential sequence and inserting 1 foreign sequence
so that expression of a sequence different from the wild type is achievable, able to mediate or
inhibitable.

USE - The VV is used for transient gene therapy, for treatment of tumours, autoimmune diseases
and wounds, for treatment of retroviral (esp. HIV) infections and for the prodn. of a medicament
for oral admin. of proteins and/or nucleic acids.

ADVANTAGE - No transcription-regulating sequences are required.

44. Document ID: EP 842194 A1, WO 9623814 A1, AU 9648613 A, US 5686281 A, US 5712149 A
Entry 44 of 48
File: DWPI
May 20, 1998

DERWENT-ACC-NO: 1996-371374
DERWENT-WEEK: 199824
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TITLE: Chimeric membrane bound receptor molecules - used for delivery of co-stimulating signals,
for treating e.g. tumours, disease or viral infection
INVENTOR: ANDERSON, S J; ROBERTS, M R

PRIORITY-DATA:
1995US-0383749
February 3, 1995
1995US-0455860
May 31, 1995

PATENT-FAMILY:
PUB-NO
PUB-DATE
LANGUAGE
PAGES
MAIN-IPC
EP 842194 A1
May 20, 1998
E
000
C07K014/705
WO 9623814 A1
August 8, 1996
E
081
C07K014/705
AU 9648613 A
August 21, 1996
N/A
000
C07K014/705
US 5686281 A
November 11, 1997
N/A
020
C12N015/62
US 5712149 A
January 27, 1998
N/A
022
C07K014/705

INT-CL (IPC): C07 K 14/705; C07 K 19/00; C12 N 15/62

ABSTRACTED-PUB-NO: US 5686281A
BASIC-ABSTRACT:

The following chimeric DNA sequences are new: (A) a sequence (I) encoding a chimeric
membrane-bound protein (MBP) comprising in frame: (a) a signal sequence; (b) an extracellular
binding domain (EBD) of a surface membrane or secreted protein that binds specifically to at
least one ligand; (c) a transmembrane domain (TD), which is joined to the EBD; (d) a heterologous
cytoplasmic domain (CD) of a protein which co-stimulates effector function signalling in a cell;
(B) a sequence (II) encoding a hybrid chimeric membrane-bound receptor protein (MBRP), comprising
in frame: (a) components (a)-(c) as in (A); (b) a CD of a protein which co-stimulates
transduction of an effector function signal in a cell; and (c) a cytoplasmic effector function
signalling domain (CEFSD) that encodes a polypeptide that transduces an effector function signal
in a host cell, where the EBD and the CD's are not naturally joined together; (C) a chimeric DNA
sequence (III) encoding a hybrid chimeric MBRP as in (B), in which components (b) and (c) are
reversed; when the chimeric DNA is expressed as a chimeric MBP or a hybrid chimeric MBRP in a
selected host cell, the chimeric MBP co-stimulates effector function signalling in the host cell
upon binding of a ligand to the EBD and the MBRP initiates an effector function signal and a
co-stimulatory effector function signal upon binding of a ligand to the EBD.

USE - The chimeric CRP's can be used to augment effector function by host cells, eg. to augment
cytolytic activity, to increase cytokine prodn., to provide resistance to energy, to increase
proliferation or to increase differentiation and/or maturation (claimed). The CRP's maybe
introduced into a cell in a claimed method for treating a disease, cancer or a viral infection by
directly or indirectly killing diseased cells, tumour cells or cells infected with viruses. They
can be used in the treatment of neoplastic cells, virus-infected cells, parasite-infected cells
or other diseased cells. They can also be used in the treatment of autoimmune disorders and in
gene therapy.
ABSTRACTED-PUB-NO:

US 5712149A EQUIVALENT-ABSTRACTS:

A method for augmenting an immune cell effector function by providing a co-stimulatory signal to
a host cell comprising:

a) introducing a DNA expressing a chimeric co-stimulatory receptor protein into a host cell under
conditions suitable for expression of said chimeric receptor protein to produce

receptor-expressing cells; and

b) contacting said receptor-expressing cells with a target ligand, wherein said chimeric receptor
protein comprises in the N-terminal to c-terminal direction:.

an extracellular ligand-binding domain that binds said target ligand;

a transmembrane domain; and

a cytoplasmic co-stimulatory domain; wherein said cytoplasmic domain is CD2 or CD28; and wherein
said extracellular domain is not obtained from CD2 or CD28.

The following chimeric DNA sequences are new: (A) a sequence (I) encoding a chimeric
membrane-bound protein (MBP) comprising in frame: (a) a signal sequence; (b) an extracellular
binding domain (EBD) of a surface membrane or secreted protein that binds specifically to at
least one ligand; (c) a transmembrane domain (TD), which is joined to the EBD; (d) a heterologous
cytoplasmic domain (CD) of a protein which co-stimulates effector function signalling in a cell;
(B) a sequence (II) encoding a hybrid chimeric membrane-bound receptor protein (MBRP), comprising
in frame: (a) components (a)-(c) as in (A); (b) a CD of a protein which co-stimulates
transduction of an effector function signal in a cell; and (c) a cytoplasmic effector function
signalling domain (CEFSD) that encodes a polypeptide that transduces an effector function signal
in a host cell, where the EBD and the CD's are not naturally joined together; (C) a chimeric DNA
sequence (III) encoding a hybrid chimeric MBRP as in (B), in which components (b) and (c) are
reversed; when the chimeric DNA is expressed as a chimeric MBP or a hybrid chimeric MBRP in a
selected host cell, the chimeric MBP co-stimulates effector function signalling in the host cell
upon binding of a ligand to the EBD and the MBRP initiates an effector function signal and a
co-stimulatory effector function signal upon binding of a ligand to the EBD.

USE - The chimeric CRP's can be used to augment effector function by host cells, eg. to augment
cytolytic activity, to increase cytokine prodn., to provide resistance to energy, to increase
proliferation or to increase differentiation and/or maturation (claimed). The CRP's maybe
introduced into a cell in a claimed method for treating a disease, cancer or a viral infection by
directly or indirectly killing diseased cells, tumour cells or cells infected with viruses. They
can be used in the treatment of neoplastic cells, virus-infected cells, parasite-infected cells
or other diseased cells. They can also be used in the treatment of autoimmune disorders and in
gene therapy.

WO 9623814A

45. Document ID: WO 9614874 A1, AU 9538133 A
Entry 45 of 48
File: DWPI
May 23, 1996

DERWENT-ACC-NO: 1996-259573
DERWENT-WEEK: 199626
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TITLE: Gene therapy to suppress immune response - comprises administering immunosuppressive amt.
of tolerogenic conjugate prior to therapeutic genetic material coupled to mono:methoxy-polyethylene glycol

INVENTOR: LANG, G M; SEHON, A

PRIORITY-DATA:
1994US-0339245
November 10, 1994

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9614874 A1	May 23, 1996	E	058	A61K048/00
AU 9538133 A	June 6, 1996	N/A	000	A61K048/00

INT-CL (IPC): A61 K 47/48; A61 K 48/00

ABSTRACTED-PUB-NO: WO 9614874A
BASIC-ABSTRACT:

A gene therapy process comprises administering to a mammal an immunosuppre ssive amt. of a
tolerogenic conjugate (TC), 1 day before admin. of therapeutic genetic material (TGM), so that
the immune response is suppressed and tolerance to TGM (or its expression prod.) is developed. TC
contains the genetic material (or its prod.) coupled to monomethoxy-polyethylene glycol (A) of
mol. wt. 2-35 kD. Also new are: (1) suppression of immune (pref. IgG) response in a mammal to an
antigenic protein by admin. of the corresponding TC (here (A) may have mol. wt. 2-35 (pref. 2-10)
kD) before admin. of the antigen or its fragments; and (2) compsns. contg. TC.

USE - The method is used in gene therapy of e.g. autoimmune disease, cancer or protein deficiency
conditions (e.g. adenosine deamine deficiency, cystic fibrosis or familial hypercholesterolaemia). Both TC and TGM are administered parenterally.

ADVANTAGE - By suppressing the immune response to TGM or its prod., the efficiency of gene
therapy is improved, and the risks of anaphylactic response and immune-complex disease is
reduced.

46. Document ID: WO 9606941 A1, AU 9534733 A, DE 19524720 A1, EP 753580 A2, JP 09023889 A, CA 2181022 A, EP 807183 A1, AU 690336 B, US 5854019 A
Entry 46 of 48
File: DWPI
Mar 7, 1996

DERWENT-ACC-NO: 1996-160372
DERWENT-WEEK: 199911
COPYRIGHT 1999 DERWENT INFORMATION LTD
TITLE: DNA construct for gene therapy of immune system disorders - contains activator sequence,
promoter module and gene for active agent, providing selective expression in target cells, e.g.
for treating arthritis or leukaemia
INVENTOR: MULLER, R; SEDLACEK, H ; MUELLER, R ; WICK, M

PRIORITY-DATA:

1995DE-1024720
July 12, 1995
1994GB-0017366
August 26, 1994
1995GB-0006466
March 29, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9606941 A1	March 7, 1996	G	111	C12N015/85
AU 9534733 A	March 22, 1996	N/A	000	C12N015/85
DE 19524720 A1	January 16, 1997	N/A	010	C12N015/11
EP 753580 A2	January 15, 1997	G	012	C12N015/85
JP 09023889 A	January 28, 1997	N/A	007	C12N015/09
CA 2181022 A	January 13, 1997	N/A	000	C12N015/85
EP 807183 A1	November 19, 1997	G	000	C12N015/85
AU 690336 B	April 23, 1998	N/A	000	C12N015/85
US 5854019 A	December 29, 1998	N/A	000	C12N001/21

INT-CL (IPC): A61 K 31/70; A61 K 48/00; C07 H 21/04; C12 N 1/21; C12 N 5/10; C12 N 15/09; C12 N 15/11; C12 N 15/63; C12 N 15/85; C12 Q 1/68; G01 N 33/50

ABSTRACTED-PUB-NO: US 5854019A
BASIC-ABSTRACT:

Agent for preventing or treating diseases involving the immune system contains a DNA construct (I) that comprises an activator sequence (AS); cell-cycle regulated promoter module (PM) and DNA sequence (II) encoding an active cpd. (A).

USE - (I) are used in gene therapy of defective blood cell prodn.; autoimmune disease; allergy; transplant rejection; chronic arthritis, viral or other parasitic infections (including protective immunisation), and leukaemia/lymphoma.

ADVANTAGE - AS is activated specifically in target cells (haematopoietic, synovial, leukaemia or infected cells, parasites, macrophages or lymphocytes), the activation being regulated by PM in a cell-cycle specific manner (i.e. only in the S/G2 phase). (I) provides long-lasting expression of (A) and because of its cell/cell cycle specificity is safe, can be admin. in large doses and, if needed, treatment can be repeated many times.
ABSTRACTED-PUB-NO:

WO 9606941A EQUIVALENT-ABSTRACTS:

Agent for preventing or treating diseases involving the immune system contains a DNA construct (I) that comprises an activator sequence (AS); cell-cycle regulated promoter module (PM) and DNA sequence (II) encoding an active cpd. (A).

USE - (I) are used in gene therapy of defective blood cell prodn.; autoimmune disease; allergy; transplant rejection; chronic arthritis, viral or other parasitic infections (including protective immunisation), and leukaemia/lymphoma.

ADVANTAGE - AS is activated specifically in target cells (haematopoietic, synovial, leukaemia or infected cells, parasites, macrophages or lymphocytes), the activation being regulated by PM in a cell-cycle specific manner (i.e. only in the S/G2 phase). (I) provides long-lasting expression of (A) and because of its cell/cell cycle specificity is safe, can be admin. in large doses and, if needed, treatment can be repeated many times.

47. Document ID: JP 10508187 W, WO 9606933 A1, AU 9535186 A, EP 781333 A1
Entry 47 of 48
File: DWPI
Aug 18, 1998

DERWENT-ACC-NO: 1996-160364
DERWENT-WEEK: 199843

TITLE: Mammalian cells expressing thrombomodulin under activating conditions - useful for gene therapy, for transplantation and for treating inflammatory or thrombotic conditions
INVENTOR: BACH, F H; WRIGHTON, C

PRIORITY-DATA:
1994US-0296945
August 26, 1994

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 10508187 W	August 18, 1998	N/A	045	C12N015/09
WO 9606933 A1	March 7, 1996	E	044	C12N015/12
AU 9535186 A				

March 22, 1996
N/A
000
C12N015/12

EP 781333 A1
July 2, 1997
E
000
C12N015/12

INT-CL (IPC): A01 K 67/027; A61 K 35/36; A61 K 38/00; A61 K 48/00; C12 N 5/10; C12 N 7/00; C12 N
15/09; C12 N 15/12; C12 N 15/86; C12 P 21/02; C12 N 5/10; C12 R 1/91; C12 P 21/02; C12 R 1/91

ABSTRACTED-PUB-NO: WO 9606933A
BASIC-ABSTRACT:

The following are new: (A) method of genetically modifying mammalian cells to render them less
susceptible to an inflammatory or immunological stimulus comprises inserting DNA encoding a
functional thrombomodulin (TM) protein under control of a suitable promoter (P) in the cells or
their progenitors, TM being expressed from these cells under endothelial cellular activating
conditions; (B) a retroviral construct comprising: (a) a 5' -long terminal repeat (LTR) of a
retrovirus; (b) a retroviral packaging signal downstream from the 5'-LTR; (c) DNA encoding TM in
operative association with the Herpes simplex thymidine kinase promoter downstream from the
5'-LTR; and (d) a 3' -LTR; (C) graftable mammalian endothelial cells, tissues or organs
comprising DNA encoding TM under control of a constitutive, regulatable and/or inducible
promoter; and (D) a non-human transgenic mammal contg. DNA encoding TM from a different species
(esp. a transgenic pig or mouse able to encode human TM).

USE - The method can be used to render endothelial cells less susceptible to an inflammatory or
immunological stimulus. Particular applications are in transplantation, in gene therapy to
inhibit thrombosis and to alleviate autoimmune diseases such as multiple sclerosis.

ADVANTAGE - Rendering cells and organs destined for transplantation less susceptible to
thrombogenicity will prolong organ transplant survival, while minimising the toxicity and other
adverse side effects associated with large doses of immunosuppressants, which are presently in
use.

48. Document ID: ES 2132063 T3, EP 405972 A, JP 03039088 A, CA 1337644 C, JP 2656988 B2, EP 405972 B1, DE 69033083 E, CA 1340565 C
Entry 48 of 48
File: DWPI
Aug 16, 1999

DERWENT-ACC-NO: 1991-009282
DERWENT-WEEK: 199939

TITLE: Sepg. cells from mixt. by depletion or positive selection - using receptors specific for
ligand present on cells, for prepn. of compsns. to treat AIDS, cancer, etc.
INVENTOR: LAMONS, D; OKARMA, T B ; OKRONGLY, D A

PRIORITY-DATA:
1989US-0374091
June 29, 1989

PATENT-FAMILY:
PUB-NO
PUB-DATE
LANGUAGE
PAGES
MAIN-IPC

ES 2132063 T3
August 16, 1999
N/A
000
C12N005/00

EP 405972 A
January 2, 1991
N/A
019
N/A

JP 03039088 A
February 20, 1991
N/A
000
N/A

CA 1337644 C
November 28, 1995
N/A
000
C12N005/08

JP 2656988 B2
September 24, 1997
N/A
015
C12N005/10

EP 405972 B1
May 6, 1999
E
000
C12N005/00

DE 69033083 E
June 10, 1999
N/A
000
C12N005/00

CA 1340565 C
May 25, 1999
E
000
C12N005/08

INT-CL (IPC): A61 K 35/00; A61 K 35/12; A61 K 35/14; A61 M 1/36; C07 K 17/08; C12 N 5/00; C12 N
5/06; C12 N 5/08; C12 N 5/10; C12 N 7/02; G01 N 33/ 545; G01 N 33/554

ABSTRACTED-PUB-NO: EP 405972A
BASIC-ABSTRACT:

Method for changing the compsn. of a mixt. of replicatable biological particles, uses receptors
specific for at least one ligand present on the particles; the receptors are bound to a smooth,
plastic surface in a uniform dense distribution to provide saturation for a uniform layer of
particles. The method is effected by: (a) contacting the surface with the mixt. of particles for
sufficient time to allow binding; (b) vigorously removing non-specifically bound particles
without disturbing those bound specifically; and (c) releasing the particles free of receptor, by
mechanical disruption or mitogenic release with a mitogenic agent.

Also claimed are methods, using the above protocol, for the prepn. of specific therapeutic
compsns. for treatment of: (1) AIDS, (2) cancer, (3) autoimmune disease, and (4) gene therapy.

Methods are also claimed for prepn. of homogeneous populations of: (5) lymphokine activated
killer cells (LAK cells) - effected by contacting PBMC from a cancer

patient with CD3/CD5
specific MAb, then contacting the CD3/CD5 depleted effluent with CD14, CD19, CD20 specific MAb,
and culturing the unbound cells as above; and (6) activated T-cells-effected by contacting PBMC
with T-cell specific MMAb and contacting the released T-cells with activating CD3-specific MAb. A
homogeneous population of cells prepd. according to any of the above methods is also claimed.

USE/ADVANTAGE - The method allows effective separation of cells from a mixt. using depletion or
positive selection to provide a cellular population of interest. Of particular use is the
separation of cells from PBMCs, where members of the lymphoid or myeloid lineages may be isolated
and used for research, diagnosis or therapy. Cells can also be separated from bone marrow,
tumours or lymphoid tissue.
ABSTRACTED-PUB-NO:

EP 405972B EQUIVALENT-ABSTRACTS:

Method for changing the compsn. of a mixt. of replicatable biological particles, uses receptors
specific for at least one ligand present on the particles; the receptors are bound to a smooth,
plastic surface in a uniform dense distribution to provide saturation for a uniform layer of
particles. The method is effected by: (a) contacting the surface with the mixt. of particles for
sufficient time to allow binding; (b) vigorously removing non-specifically bound particles
without disturbing those bound specifically; and (c) releasing the particles free of receptor, by
mechanical disruption or mitogenic release with a mitogenic agent.

Also claimed are methods, using the above protocol, for the prepn. of specific therapeutic
compsns. for treatment of: (1) AIDS, (2) cancer, (3) autoimmune disease, and (4) gene therapy.

Methods are also claimed for prepn. of homogeneous populations of: (5) lymphokine activated
killer cells (LAK cells) - effected by contacting PBMC from a cancer patient with CD3/CD5
specific MAb, then contacting the CD3/CD5 depleted effluent with CD14, CD19, CD20 specific MAb,
and culturing the unbound cells as above; and (6) activated T-cells-effected by contacting PBMC
with T-cell specific MMAb and contacting the released T-cells with activating CD3-specific MAb. A
homogeneous population of cells prepd. according to any of the above methods is also claimed.

USE/ADVANTAGE - The method allows effective separation of cells from a mixt. using depletion or
positive selection to provide a cellular population of interest. Of particular use is the
separation of cells from PBMCs, where members of the lymphoid or myeloid lineages may be isolated
and used for research, diagnosis or therapy. Cells can also be separated from bone marrow,
tumours or lymphoid tissue.

Term

Documents

1 NEAR5 2

including document number

Display Format: